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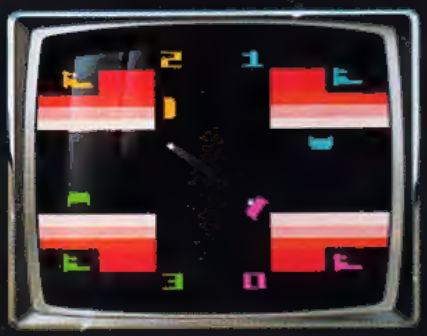

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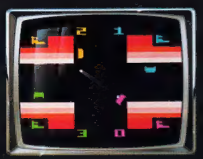

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Today ATARI Missile Command™ and Asteroids™ are the fastest selling home video games in the country. And judging by its current success in the arcades, ATARI Pac Man** is slated for the same next year.

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electronic GAMES

Volume 1, Number 1

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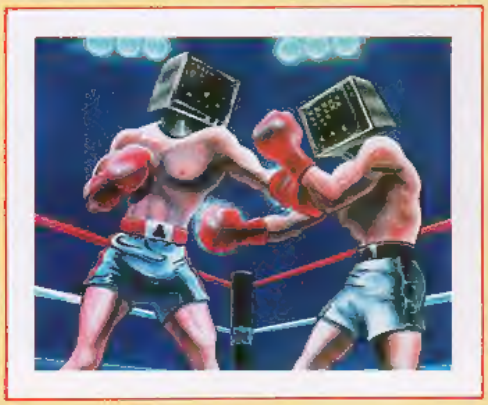

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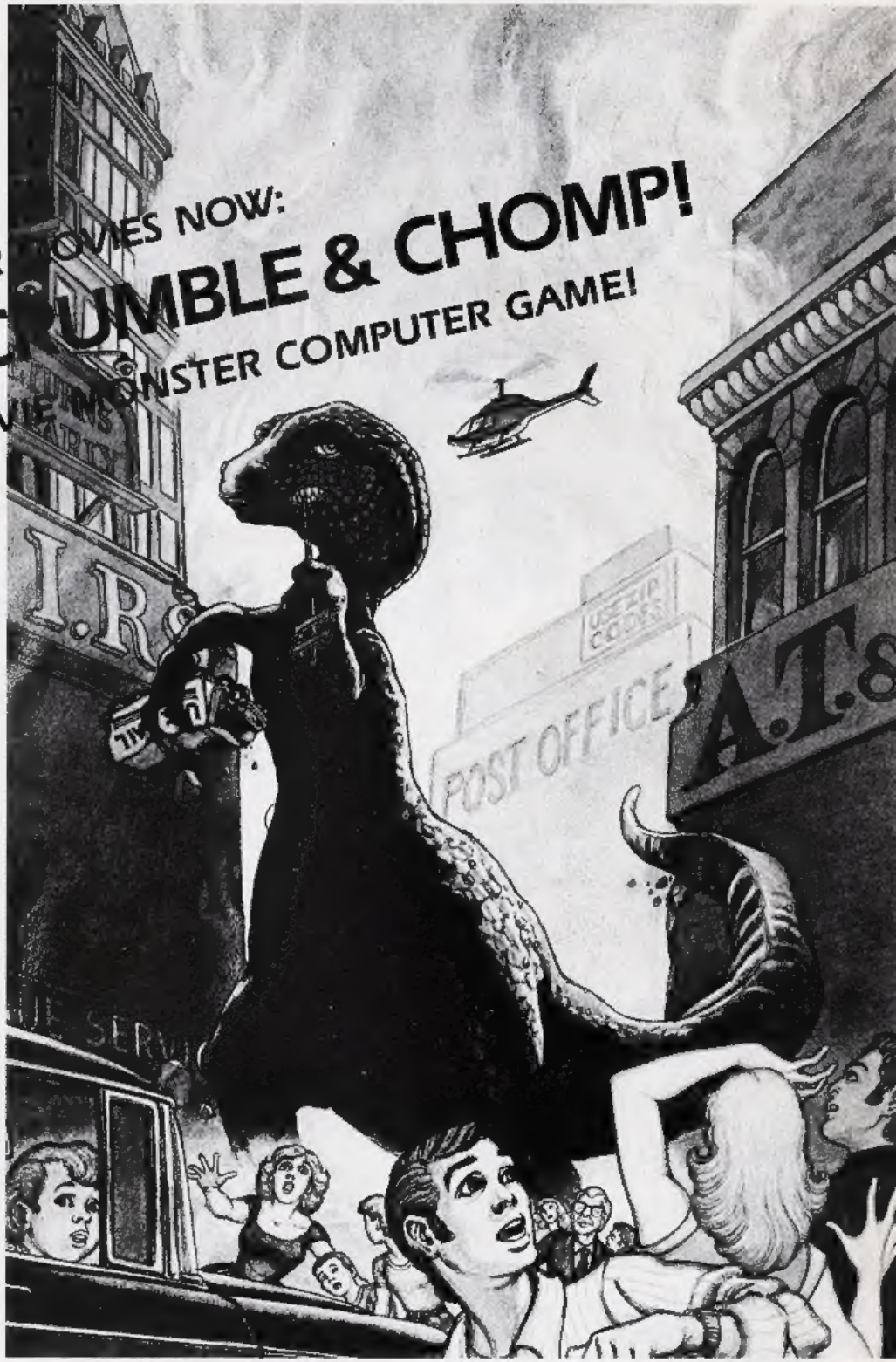
FIRST: MONSTER MOVIES NOW:

CRUSH, CRUMBLE & CHOMP!

THE GREAT MONSTER COMPUTER GAME!



And guess who stars as the movie monster. You! As any of six different monsters. More if you have the disk version.

You can terrorize and destroy four of the world's largest and most densely populated cities in over 100 possible scenarios. From Tokyo to the Golden Gate, you are the deadliest creature in the air, on the land, or in the sea.

You can be the deadly amphibian who simultaneously smashes street cars, lunches on helpless humans and radiates a ray of death.

If you were a giant winged creature, think of the aerial attacks you could make on the terrified but tasty tidbits beneath you.

But as in all the best monster movies, you're up against everything the human race can throw at you—even nuclear warheads and a strange concoction developed by a team of mad scientists.

For only $29.95 you get 6 stupendous monsters, each with its own monstrous summary card, 4 teeming metropoli displayed in graphic detail on your computer display and mapped in the accompanying 48-page illustrated book, the awesome sounds of monsterly mayhem, and spine-tingling, real-time, edge-of-your-seat excitement.

GET CRUSH, CRUMBLE & CHOMP
now at your local dealer for your APPLE, ATARI, or TRS-80 . . **before it's too late.**

COMPUTER GAMES THINKERS PLAY EDYX

by Frank Laney Jr.

Welcome To ELECTRONIC GAMES

Did you know that you're a member of the world's fastest-growing hobby group? It's true. Although the first **Pong** machine made its debut only a decade ago, today more than five million Americans regularly play electronic games.

The introduction of space-age electronic amusements amounts to nothing less than an entertainment revolution. Check out some of these startling statistics:

- ★ Nearly four million homes now have programmable videogame systems.
- ★ This year alone, Americans will buy two million videogame systems—and 20 million cartridges to use with them.
- ★ Gamers pour 10 million quarters into **Asteroids** coin-operated machines every single day.

And now the hobby is reaching another milestone. At last there's a high-quality newsstand publication that we arcaders can really call our own. Reese Publishing Co., prompted by your overwhelming support of the "Arcade Alley" column in **Video**, is giving all lovers of electronic games a rallying point.

What kind of magazine will **Electronic Games** be? For openers, this publication is written by actual gamers for actual gamers. You'll never see so-called "reviews" written directly from manufacturers' press releases by know-nothing writers in these pages. That's a promise. Everyone on our staff, from co-founder and executive editor Bill Kunkel to staffers like Frank Tetro and Joyce Worley, are nuts about these games.

In this and upcoming issues, we'll be covering every facet of the fast-changing world of electronic gaming. We'll cover the entire spectrum of this fascinating hobby from the tiniest hand-helds to the most sophisticated computer simulations, with plenty of emphasis on videogames and commercial arcades.

Exactly how much space we devote to each aspect of electronic gaming depends on you, the readers. Please take a few minutes to fill out and mail the readers poll located elsewhere in this issue. It'll do a lot to help us create exactly the type of magazine you want.

Why not drop us a line? Tell us what you liked—and what you didn't—about this premiere issue of **Electronic Games.** And feel free to comment on any of the ideas and opinions aired by our writers.

One final promise: This installment of "Switch On!" will probably be the most sober-sided piece you'll ever read in this magazine. We try to take electronic gaming seriously, but not, we hope, solemnly. After all, fun is what this hobby—and **Electronic Games**—is supposed to be about. We want this magazine to be as colorful and exciting as the games themselves.

Welcome to **Electronic Games.** Let's play! ★

A Message To Readers of E. G.

When Frank Laney Jr and Bill Kunkel first proposed an electronic games column for **Video** magazine, it sounded like an interesting idea. We weren't sure our readers had enough interest in this new "sport" to justify such a column, but we decided we had nothing to lose by trying it out.

Not only did **Video** not lose anything by inaugurating the now-popular "Arcade Alley," but we've gained a whole new magazine, **Electronic Games.**

Cast in the same mold as **Video**—the leading home video periodical—**EG** is written by the field's top authorities and edited to appeal to the growing legion of arcade addicts.

Both Bill and Frank are expert gamers who, through "Arcade Alley" and direct consultation with game designers, have contributed notably to popularizing and refining the noble art of electronic gamesmanship.

They originated the **Video** magazine "Arcade Awards" (Arkies) to honor excellence in electronic gaming, and they are recognized by manufacturers and players alike as the top commentators on America's fastest-growing home entertainment hobby.

With so many half-baked electronic entertainment magazines floating around these days, we feel it is important to assure you that **Electronic Games** will maintain the same editorial integrity and excellence readers have come to expect from **Video** Magazine.

Our primary goal, as it has always been with **Video** Magazine, is to remain responsible and responsive to our readers.

Bruce Apar

BRIDGE PLAYERS

THE SKILLS OF THE EXPERTS ARE NOW AVAILABLE TO YOU

AT A $100 DISCOUNT

"I HAVE BEEN TO THE FUTURE, AND IT WORKS!"

These are the words of Alfred Sheinwold, bridge expert, when he first played the new Voice Bridge Challenger: "I have been to the future, and it works!" With Challenger, you never have to miss a game of bridge even if you're alone or with friends. Challenger actually consists of four computer bridge players. It's you against the computer—Challenger will play the other three hands; it can be your opponents—Challenger plays two hands allowing you to compete with a friend by providing exactly equal ability for each partner, or you and a partner can play against the computer; it can be a partner if you are three and need a fourth; or it can play all four hands after you have finished a deal just to see how Challenger would handle the situation.

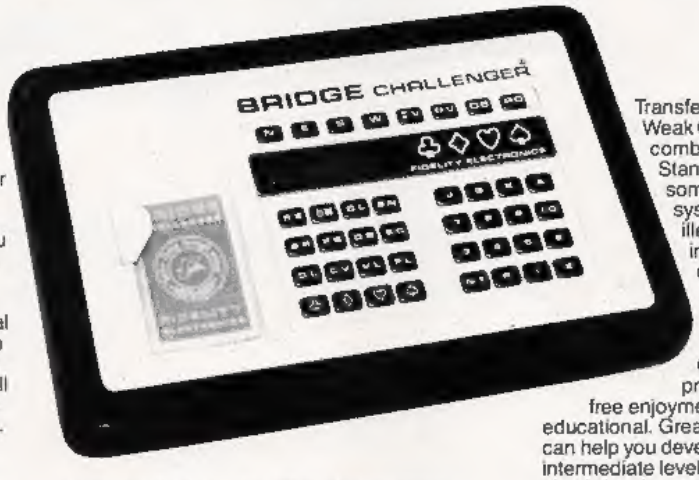
Imagine noted bridge expert Alfred Sheinwold who, in a recent issue of Popular Bridge magazine, describes how he came to name his Bridge Challenger "Charlie." As Mr. Sheinwold, syndicated columnist and well known author of FIVE WEEKS TO WINNING BRIDGE tells it, he missed two deadlines when he got involved with Charlie. It's easy to forget that Charlie isn't human because it not only reads the cards,

Alfred Sheinwold, noted bridge expert, puts Fidelity's Bridge Challenger through some intricate bridge play.

develops strategy and plays a demanding game of bridge—it also talks to you. During bidding it clearly announces both its own and the human player's bids and plays using popularly accepted bridge terminology. In fact, Mr. Sheinwold ends his five-page article wherein he praises the performance of Bridge Challenger by saying, "If you can't afford to buy a Bridge Challenger, make friends with someone who can!"

THE SECRETS OF THE EXPERTS

Make no mistake! This is no gimmicky toy-like contraption! Compact, completely solid state, it contains the best that today's electronic state-of-the-art has to offer... and a little bit of tomorrow. Voice Bridge Challenger's tiny



computer "brain," a marvel of microprocessor precision, has been built to play like a pro. In fact the engineers and programmers who designed it are pros... and Fidelity was first to pioneer the entire revolutionary concept of a computerized opponent and make it popular world-wide. The highly sophisticated program is the result of the combined skills of many expert bridge players and programmers who perfected and refined Challenger's capabilities to a high degree of "bridge sense." Challenger truly knows many secrets of the experts.

IF YOU LIKE THE GAME OF BRIDGE, YOU'LL SURELY LOVE FIDELITY'S NEW VOICE BRIDGE CHALLENGER. BRIDGE EXPERTS AND EVERY-DAY ENTHUSIASTS ARE USING WORDS LIKE "INCREDIBLE"-"EXCITING"-"PRACTICALLY HUMAN" TO DESCRIBE THIS COMPLETELY NEW INNOVATION TO THE ENORMOUSLY POPULAR GAME OF BRIDGE. WITH VOICE BRIDGE CHALLENGER, YOU NEVER HAVE TO MISS A GAME OF BRIDGE... EVEN IF YOU'RE ALONE!

When it comes to playing bridge, this computerized opponent does everything a human can do... it reads the cards, bids the hand (actually calls out each bid in a clear, understandable voice), plans strategy, and plays out the hand with a precision and extraordinary ability that will delight and amaze you. Bridge Challenger truly comes to you right out of the future.

There's more. Much more. Voice Bridge Challenger contains an advanced new bridge bidding and playing program. A sophisticated optical scanner precisely reads custom coded playing cards. An automatic replay feature causes the computer to take over all four hands at the press of a button and replay the deal you have just completed, making it easy for you to test your skill and/or play duplicate bridge against the computer. During the bidding, Challenger uses such well-known conventions as Stayman, Gerber, Blackwood, Jacoby Transfers, Baron, Strong Two Club, Weak One No-Trump Openers, etc. It combines the essential features of Standard American bidding with some aspects of such European systems as ACOL. It rejects illegal bids, displays revokes, indicates vulnerability and dealer, and will even review bidding and last deal on demand.

The Fidelity Voice Bridge Challenger is built to last. It will provide endless hours of trouble-free enjoyment... tough, challenging and educational. Great for practice or serious play, it can help you develop from a novice to a high intermediate level. And just think of the impression it'll make among your bridge friends.

Voice Bridge Challenger is 100 percent solid state. The voice feature is not a tape recording—words are formed according to play action by a computer-controlled voice synthesizer. The black wood cabinet measures 13" x 7" x 1⅛" overall and it operates on standard household current. Each unit is complete with two custom-made, plastic-coated bridge decks, three felt playing pads, AC transformer, and deluxe carrying case with fitted felt-like interior.

THE PRESENT SALE PRICE OF $199.95 IS AN INTRODUCTORY OFFER. IT MAY NOT BE DUPLICATED OR REPEATED. DURING THE COMING HOLIDAY SEASON PRICE WILL REVERT TO THE REGULAR PRICE OF $299.95. BUY NOW AND SAVE.

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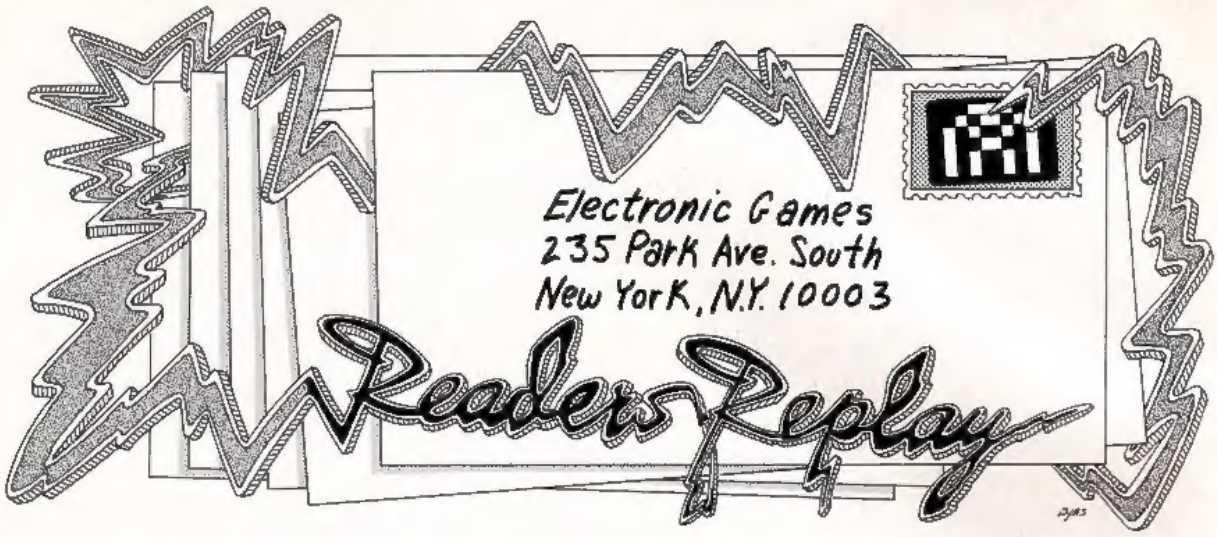


Team Spirit

Congratulations on the debut of your new magazine.

As games designers, we are naturally pleased that there will be a magazine entirely devoted to the field of electronic gaming.

Good luck!

The ActiVision Design Staff
Alan Miller
David Crane
Larry Kaplan
Bob Whitehead
Steve Cartwright

Ed: If we can write the magazine as well as you guys design the games, it'll be clear sailing.

★ ★ ★

Beyond Imagination

Congratulations!

Your magazine is sure to fill a vacuum in the world of home videogames. It's been slightly less than 10 years since the first home video game was introduced to the market—it was an Odyssey.

The industry has grown rapidly. The sophistication and challenge of today's games are beyond anything we imagined 10 years ago. The time is right for a great magazine like yours which is edited by people who are experts in the field of videogames.

It boggles the mind when one thinks of the content of your tenth anniversary edition in 1991. Good luck.

Gerald A. Michaelson
Vice President Sales, Special Markets
N.A.P. Consumer Electronics Corp.
Knoxville, Tenn.

Ed: Yes, it's certainly the rapid pace of technological innovation that gives the hobby of electronic gaming a lot of its spice. Who knows, by the 1990's, we may be playing with 3-D holograms.

★ ★ ★

Explosive Field

Best wishes and success on your new venture.

In the last 18 months, the videogame business has literally exploded, and the time is right for a magazine devoted to video and other electronic games.

We at ActiVision would like to offer our support and encouragement to all of you at **Electronic Games**.

James H. Levy
President, ActiVision
Santa Clara, Ca.

Ed: Like the cooch dancer at the carnival said to the crowd as it entered, "You ain't seen nothin' yet!" We at EG believe the next 18 months will be even more explosive than the last year-and-a-half.

★ ★ ★

A Source of Relaxation

It's finally happened! A magazine devoted to electronic games. All the "gamers", including myself will now have a magazine written about electronic fun.

Many business programmers need the relaxation of a good game. I do.

Best of luck with the new magazine. I hope you will find it a pleasant adventure.

Scott Adams
Author of Adventure Series
Adventure International
Longwood, Fla.

Ed: Say, Scott, do you think you could include the command "buy magazine" in your next adventure game?"

★ ★ ★

Others Ignore Games

I am really excited about your new magazine **Electronic Games**. Many of the industry's microcomputer magazines overlook or pass off the entertainment uses of micro-processors.

Electronic computer fun is the ultimate in game simulation. Electronic games offer incredible challenge and excitement, magnified by the interaction between man and machine. Your magazine has a tremendous niche in the marketplace.

Zap those Kingons!

Richard R. Richmond
Director of Marketing
Adventure International
Longwood, Fla.

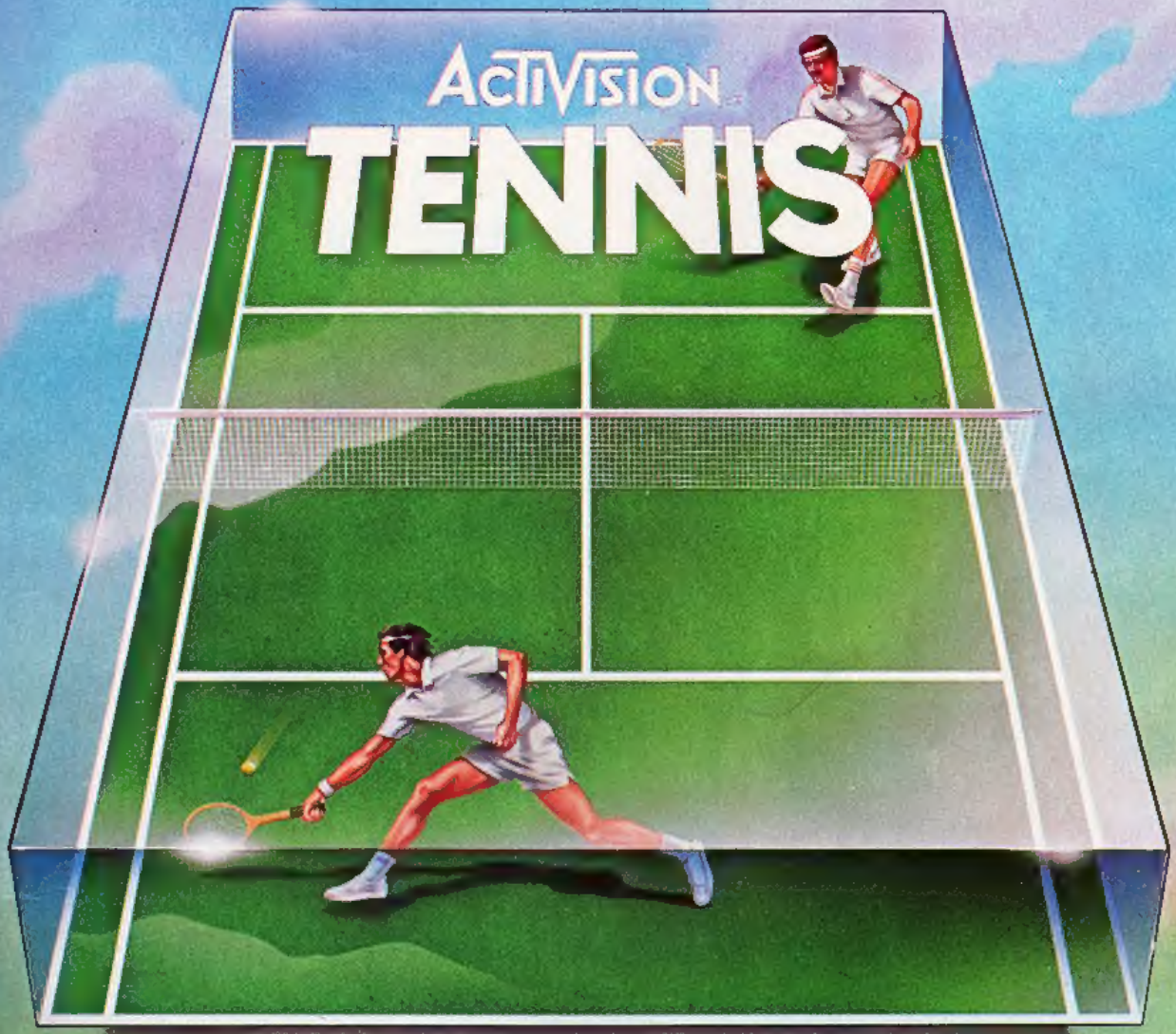
Ed: We couldn't agree more. That's why the EG motto is and will remain, "The play's the thing!"

★ ★ ★

Have some thoughts to share with the readers of **Electronic Games?** Let us hear from you. Address correspondence to: **Readers Replay, Electronic Games Magazine, 235 Park Avenue South, New York, N.Y. 10003.**

As quick-witted readers will immediately realize, it's mighty hard to have a letter column in the first issue of a magazine—unless you leak advance word about it to some of the biggest names in the electronic gaming world. Next issue, of course, this page will be entirely devoted to your letters and **EG**'s editorial replies.—Frank Laney.

DON'T JUST RESERVE A COURT. OWN ONE.



If you had the choice, wouldn't you rather own the court? And play absolutely anytime you like. For as long as you like. Sure you would. And with Tennis by Activision™, you can.

It's played on your Atari* or Sears video game system.

But, don't expect an ordinary video game. Tennis by Activision is something else.

It's remarkably realistic. Capturing the speed, strategy and finesse of real tennis.

With no reservations necessary.

And that's one bit of realism we know you won't miss.

Tennis by Activision. Own one.

ACTIVISION™

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Two pictures are worth

Atari vs. Intellivision?
Nothing I could say would be more persuasive than what your own two eyes will tell you. But I can't resist telling you more.
– George Plimpton –

Two pictures are worth a thousand words.

Atari vs. Intellivision?
Nothing I could say would be more persuasive than what your own two eyes will tell you. But I can't resist telling you more.
— George Plimpton —

It's obvious how much more realistic Intellivision graphics are. But take a closer look. Notice the Intellivision players. They've got arms and legs like real players do. Look at the field. It actually looks more like a real baseball field. If you compare the two games, I think you'll find that Intellivision looks a lot more like the real thing.

Atari *Casino*™ No dealer

Intellivision *Las Vegas Poker & Blackjack*. You play cards with a shifty-eyed dealer

More about action

You can see how much more realistic Intellivision looks. What we can't show you here is how much more realistically it moves. If you could compare the two, I think you'd see that Intellivision has smoother and more life-like movement than Atari.

Atari *Pele's Championship Soccer*™ players

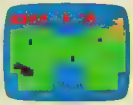
Intellivision *NASL Soccer*™* players

More about control

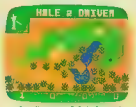
If you've ever played a video game, you know how important control is. And if you held these two control units in your hand, you'd know Intellivision gives you more. The Atari hand controller offers only 8 positions and one button. The Intellivision hand controller has 16 positions and 4 buttons. So Intellivision allows you to maneuver players and objects in more directions with greater precision and accuracy. And the Intellivision controller is compatible with the entire library. With Atari, some games require the purchase of additional control units.

More about challenge

You can't see it here, but I have found that in many of the Atari programs, the game play is rather simplistic. With Intellivision, the game play is more sophisticated. And that makes Intellivision more challenging. With Intellivision PGA Golf for instance, you get nine different clubs to choose from. With Atari Golf, you have to make do with just one club. Greater attention to detail is a quality I have found in all of the Intellivision games. Making them more realistic. And more challenging.



Atari *Golf*



Intellivision *PGA Golf*™

More about libraries

Both Intellivision and Atari have large libraries. But there really isn't any way you can tell which library is better, until you play with both. Once you compare the two systems for challenge, sophistication and continued interest, I'm confident you'll choose Intellivision. But don't just take my word for it. Visit your local dealer and decide for yourself.

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a thousand words.

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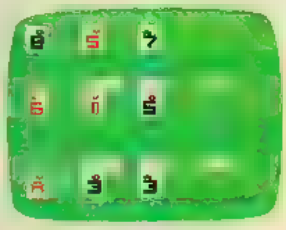

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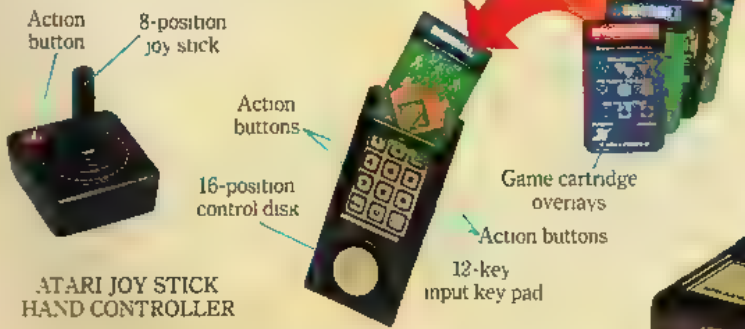
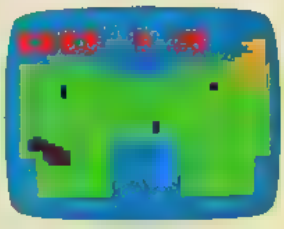


ATARI JOY STICK HAND CONTROLLER

INTELLIVISION HAND CONTROLLER

More about challenge

You can't see it here, but I have found that in many of the Atari programs, the game play is rather simplistic. With Intellivision, the game play is more sophisticated And that makes Intellivision more challenging. With Intellivision PGA Golf for instance, you get nine different clubs to choose from. With Atari Golf, you have to make do with just one club. Greater attention to detail is a quality I have found in all of the Intellivision games. Making them more realistic. And more challenging.



Atari *Golf*

Intellivision *PGA Golf* ™*

More about libraries

Both Intellivision and Atari have large libraries. But there really isn't any way you can tell which library is better, until you play with both. Once you compare the two systems for challenge, sophistication and continued interest, I'm confident you'll choose Intellivision. But don't just take my word for it. Visit your local dealer and decide for yourself.

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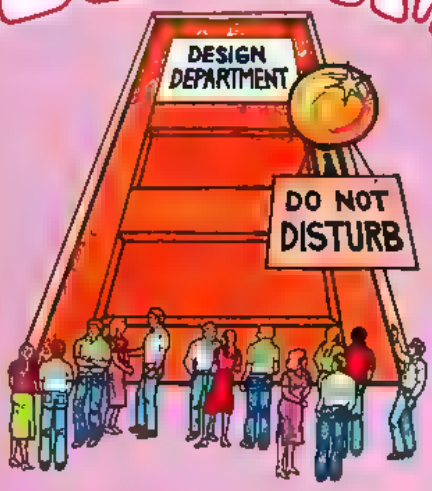
INSIDE GAMING



Playing "Chicken" with David Crane

"Wow! I wonder how they ever got the idea for this one?"

How many times have you asked that question while playing some mind-boggling new electronic game? What arcader hasn't wondered, perhaps while waiting for the next turn to play, what inspires designers to create games like **Pong, Space Invaders** or **Freeway?**

Wonder no more. Each issue, in "Inside Gaming," we'll be going behind the locked doors of the research and development laboratories to bring you the story behind the games you love most.

It takes an unusual imagination to conceive a videogame in which two players attempt to race chickens across a 10-lane highway with traffic running from right to gridlock. And every time a poor duck gets hit by a car or truck it flutters back to the preceding lane for safety. Unless, that is, it's then hit by a second vehicle that knocks it still further back toward its starting point.

Sounds like a pretty weird game, right? Well, David Crane, a key member of Activision's crack design staff not only imagined **Freeway**, he made it come alive. So naturally, when we found ourselves sitting across from this mad inventor at Activision headquarters, we just had to ask:

Chickens cha-cha across a busy ten-lane roadway in Dave Crane's FREEWAY.

"Wow, Dave, how did you get the idea for **Freeway**?"

The story of **Freeway** begins at a trade show and convention in Chicago. Dave and some friends accidently left the convention center from the wrong exit. The only way to get where they wanted to go was to brave crossing the Windy City's busiest thoroughfare at the height of the mid-afternoon crush.

As they bobbed and weaved across the mighty multi-lane road, carefully picking their path lane by lane, someone commented brightly, "Gee, this would make a great videogame!"

Crane and his buddies got safely across the highway, but the idea might well have died there. You know, just another passing joke that's soon forgotten.

And so it might have been, if fellow Activision game designer Larry Kaplan had not experienced a strikingly similar revelation. "Later that day," explains Dave Crane, "Larry was riding a bus also along Lake Shore Drive. He saw some poor guy trying to cross it against the traffic, too. The man was going crazy, dodging and darting between cars and trucks, first going forward a little and then backing up."

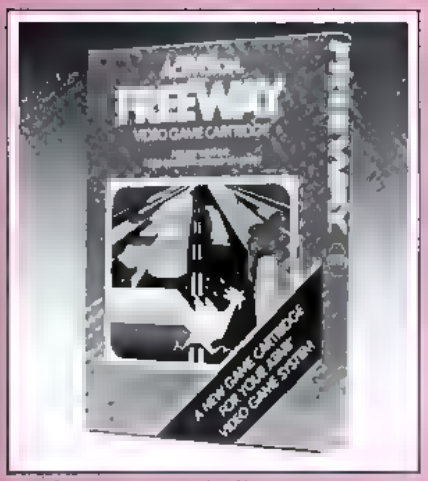
The sight impressed Kaplan enough that he mentioned it to Dave, who suddenly began to realize that this might indeed be the basis for a video game after all.

He immediately began developing the graphic elements: several types of automobiles, trucks (which always used the inside lanes) and the freeway itself. He also worked up the accompanying soundtrack of blaring truck horns and little car beeps.

Then came the first big problem. Exactly what would the gamers be maneuvering across the treacherous freeway? Originally, Crane tried a crawling human figure, but it somehow didn't seem quite right to have this poor guy squashed flat 20 times a game. So the question remained: Who—or what—was going to cross that road?

"That's where the San Diego Chicken came in," says Activision spokesperson Diane Drosnes. For the benefit of non-baseball fans, the San Diego Chicken is Ted Giannoulis, a feathered funnyman

continued on page 56



Activision's FREEWAY: Why did the chicken cross the road?

Designer David Crane answers the musical question: Why a chicken?

MEET THE EDITORS!

Are you at least mildly curious about the merry band of writers bringing you this premiere issue of **Electronic Games**? We hoped you might be. That's why we cornered every last one of them and forced them to divulge their autobiographies.

Frank Laney Jr. (Editor & Co-Publisher) is the co-founder of this magazine. He and **Bill Kunkel** co-author "Arcade Alley," the world's most widely read videogame column, each month in **Video** magazine. He and his wife live in luxurious splendor somewhere in the Big Apple, surrounded by every manner of electronic gaming device. (Ms. Laney, like her husband, has always wanted to own her own personal arcade, though she didn't expect it to be located in her living room.) Laney, who has made his living as a journalist since graduation from Barbee State College, writes primarily about electronic games and similar pop cultural subjects. He loves spicy food, games, rock music and his wife, not, of course, in that order. It is not true that he sleeps on a cabaret **Space Invaders** machine.

Bill Kunkel (Executive Editor) is the other co-founder of **Electronic Games** as well as being indisputably the better player of the pair. The 31-year-old gaming ace has co-authored, with the aforementioned **Laney**, too many articles about electronic arcading to catalogue here. A former rock guitarist and comic book scribe, Kunkel is currently recognized as one of the most incisive commentators on the contemporary scene. He is also known as "the man who beat Frank Laney at videogames ... again." Champion and confidante of electronic game designers from coast to coast, Kunkel and his cohort are regularly quoted in newspapers and national magazines.

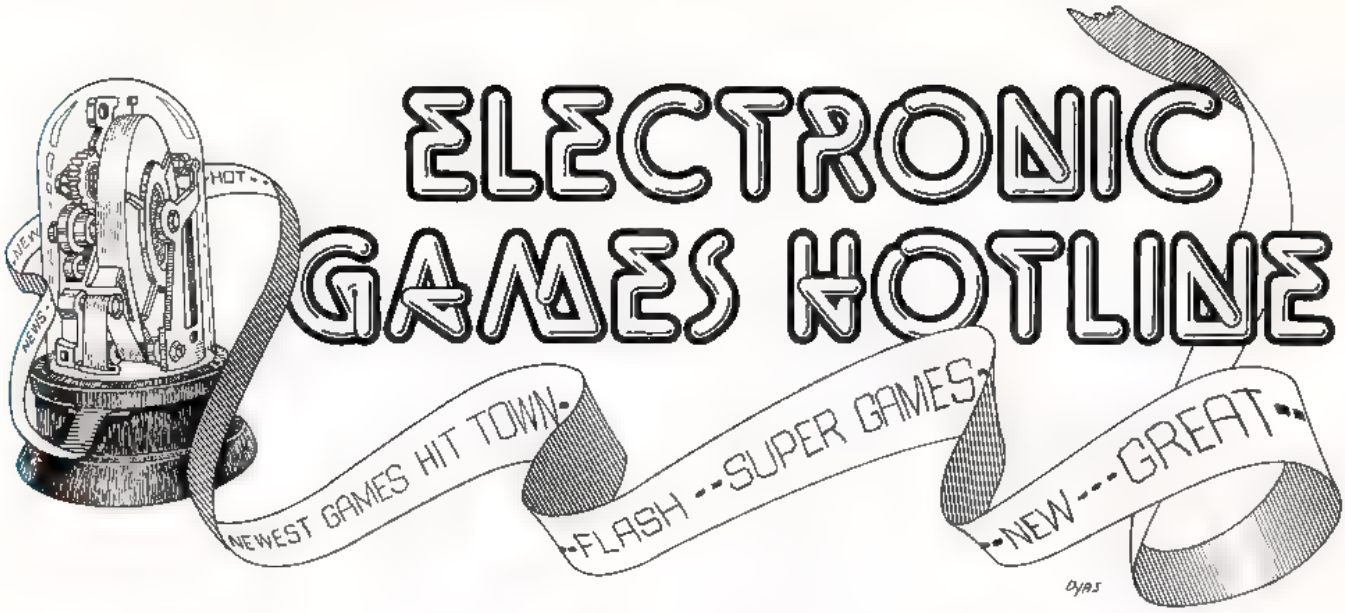
Joyce Worley (Senior Editor) is a familiar sight at arcades around New York City, where she resides with her husband of 10 years. Of course, she's been hooked on bright colors and flashing lights since her childhood in rural southeastern Missouri. As a freelance writer, her work has appeared in numerous magazines including **Odd Main Event** and **Video Magazine**. The strawberry blonde, say her co-workers, is better known for body english than high gaming scores.

Jethro Wright III (Technical Editor) is the 23-year-old whiz who does the magazine's technically-oriented "Test Lab" column. Jet, as he's known to his friends, is currently in charge of software development at CSOS, a New York City-based computer consulting firm, where he specializes in writing diagnostic programs.

Frank Tetro Jr. (Strategy Editor) is the boy wonder of the **Electronic Games** crew. The 15-year-old super-gamer from Westchester, N.Y., first came to the magazine's notice at last year's New York regional **Space Invaders** tournament. There, he astounded more than 6,000 arcaders by amassing the greatest number of points ever scored under competitive conditions. Since then, Frank's arcading exploits have been the subject of stories in **Video** and **Life** magazines. If Frank Tetro can't help gamers sharpen their skills, no one can.

Ross Chamberlain (Contributing Editor) is a genuine editorial double threat. He's both a topflight reviewer and a featured cartoonist for the magazine. The shy and more than somewhat reclusive Chamberlain turns into a veritable tiger whenever he gets a joystick in his hand. A journalist with a decade of experience, Ross is an avid fan of science fiction and fantasy in all its many forms.

Arnie Katz (Contributing Editor) is a frequent contributor to **Video** Magazine and numerous other pop culture periodicals. The 35-year-old writer is an avid arcader who expects to be doing a lot more contributing to **Electronic Games** in future issues. ★


ELECTRONIC GAMES HOTLINE

Atari confirms rumor; secret messages exist!

★Sources at Atari have confirmed one of arcading's most persistant wild stories: if a gamer sends the hero to a certain room in the VCS **Adventure** and performs a specific action, a secret message revealing the designer's name will appear on the screen. Many had scoffed at the notion, citing the fact that Atari doesn't credit designers, but it turns out to be true.

Although the programmer in question didn't see fit to let his employer in on the joke, Atari is evidently taking the whole thing with good grace. In fact, it gave Steve Wright an idea for the future.

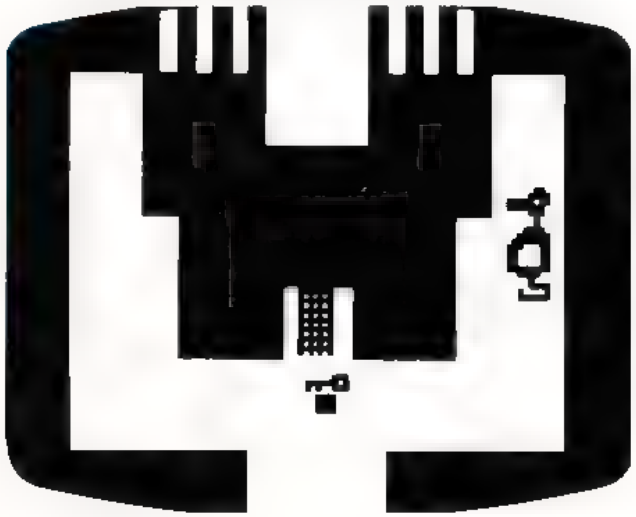
"From now on," he told **EG** in an exclusive interview, "we're going to plant little 'Easter eggs' like that in the games. Eventually, we may have a real treasure hunt, with the clues hidden in various game cartridges!"

How will arcaders know when a cartridge contains such buried treasure? By arrangement with Atari, **Electronic Games** will be able to let the gaming world know when to start hunting. We'll tell you when an "Easter egg" is buried in a new release, but not how to find it.

Atari report

★Will McDonalds be the first fast-food chain to hop on the electronic gaming bandwagon in a big way? The hamburger king has approached Atari about the possibility of designing a computerized video monitor. The device would take the meal order—and then help the customer pass the wait pleasantly by playing a videogame. One potential hitch: What happens if a player is on a hot streak when the Big Mac, fries and soft drink show up?

Say the magic word and learn ADVENTURE's secret!



Patrol the skies with Atari's RED BARON

★There's quite a story behind the delay in the release of the VCS **Asteroids** cartridge. The version the company showed a year ago received such a frosty reception from those who got an advance peek that the designers went back to the drawing board. They developed a special process that puts twice as much program—8K vs. 4K—on the cartridge as was previously possible. It seems that Atari's wizards came up with a special bank switch that flips back and forth between two 4K programs, fooling the VCS into reading them both.

★**Red Baron** is the latest addition to the quadrascan series of Atari commercial arcade machines. Gamers patrol the hi-res skies in a World War I biplane, firing at the enemy over the whirling propeller blade. Fittingly, the control is a realistic joystick. Start your engines, Atari aces.

Atari's coin-op version of WARLORDS

Tourney offers $50,000 in awards

★The biggest tournament in the history of electronic gaming is scheduled to begin in Chicago on October 29. The four-day extravaganza, billed as the Atari World Championships, will reward the best players of that company's coin-op

Last year's SI tournament attracted 10,000 video fanatics!

games with a total of $50,000 in cash and merchandise prizes.

Although the finals will coincide with the annual convention of the Amusement & Music Operators Association, preliminary rounds took place across the country during the summer and early fall. Participating commerical arcades sponsored the local events which are sending contestants to the big showdown in the Second City.

Reportedly, high-powered players who missed out on last year's hugely successful **Space Invaders** tournament are coming out of the woodwork to get a piece of this year's action.

Brett strikes out in electronic baseball

★ Everyone knows the National League won its 10th straight all-star game from the American League shortly after the strike finally ended in August. What some may not have heard is that the junior loop had already taken a drubbing at the hands of the senior circuit in a rip-snorting game of Intellivision **Major League Baseball.**

Mattel attempted to aid diamond devotees during the depths of the strike by inviting George Brett of the Kansas City Royals and Mike Schmidt of the Philadelphia Phillies over for a little game of video hardball.

Mike Schmidt turned out to be something of a natural arcader. He easily defeated Brett by a lopsided 31-7 score.

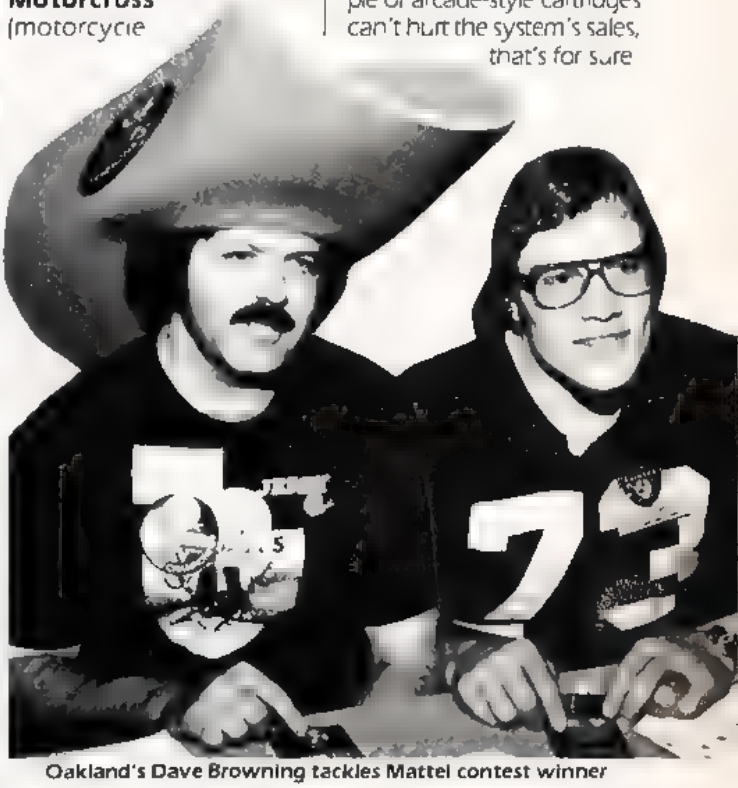
George Brett and Mike Schmidt battle head to head

Inside Mattel

★ There seems to be some kind of production logjam at Mattel. The company's designers are still creating new games for the Master Component, but many of them have yet to appear on store shelves. Some of the cartridges waiting in the wings include a USCF-approved chess program, **Motorcross** (motorcycle racing), **Submarine Battle** and a home version of the arcade stand-by in which players try to steer a constantly growing, snake-like line so as to be the last one still moving.

★ Stealing a march on the other manufacturers, Mattel has gone straight to the role-playing game source, TSR Hobbies, and pulled off a hat trick. The company now has the rights to make electronic versions of **Dungeons & Dragons** in stand-alone videogame and hand-held formats. This is right in line with Mattel's policy of securing high-class tie-ins for as many of its electronic games as possible.

★ Four new games should be on the shelves this season for owners of the Master Component. **Astrosmash** combines aspects of both **Asteroids** and **Space Invaders, Space Armada** is an **SI** variant. **Bowling** features a dual playfield and superb animation, and **Boxing** offers the most comprehensive treatment of the sport thus far. Adding a couple of arcade-style cartridges can't hurt the system's sales, that's for sure.



Oakland's Dave Browning tackles Mattel contest winner

Activision Close-up

★ Steve Cartwright is the latest addition to the ever-growing Activision design staff, which is already heavy with Arcade Award winners. The new kid on the block, a protege of David Crane, will be showing the world his first cartridge.

Activision's STAMPEDE

Face off with ICE HOCKEY

before the end of the year

★ Fans who've clamored for an Activision Club may not know that one already exists—sort of. Whenever a gamer mails in the warranty card for an Activision game, the name goes onto a special mailing list. The company then periodically sends these folks advance word of new releases.

★ The software supplier also has some smaller, considerably more exclusive societies for the game-playing elite. For example, anyone who cracks 100,000 points on **Laser Blast** gets an iron-on patch that designates the wearer a "Commander" in the Laser Blast Federation. Oh, and superstars at **Kaboom!** are eligible to join Activision's Bucket Brigade.

Score 100,000 in LASER BLAST and win a commission!

Computer Upgrade

★ Runners get shinsplints, racketball players come down with tennis elbow, and computer gamers have—chronic under-byte. Owners of some of the smaller computers, like the Atari 400 and TRS-80 Color Computer, can surmount the limitations of restricted memory with new upgrading kits.

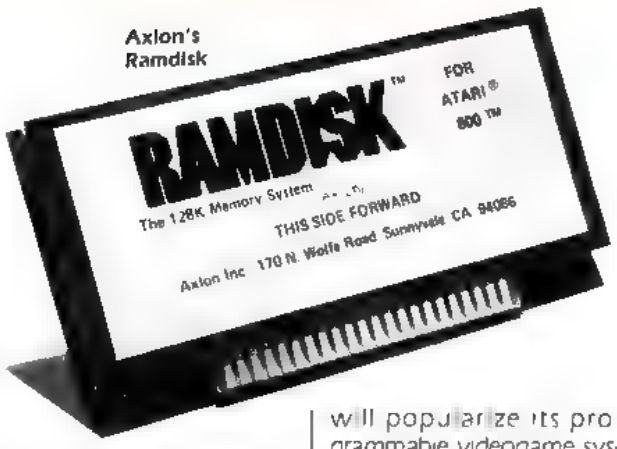
First into the field is Axion, Sunnyvale, Ca., which is offering the 32K Ramcram for the 400. Installable by even an electronics illiterate in less than 10 minutes, the Ramcram beefs up the Atari's memory enough to allow connection to a disk drive. Intec is also reportedly offering an Atari 400 upgrade.

Color Computer owners can also buy such kits, but many will probably choose to wait until Tandy's own "official" upgrade becomes available in 1982.

Cosmos Put on the Shelf

★ Those who were planning to give COSMOS to someone this holiday season had better start looking for a substitute present. Although Atari lavished much advance publicity on its holographically enhanced stand-alone programmable, the company has shuttled it back to the design department for more work.

Axion's Ramdisk



COSMOS. Maybe next year

Although the accomplishment of actually developing a commercially viable holographic process drew much admiration, the game itself received decidedly mixed reviews. The chief complaint: The holograms served as mere decoration and did not directly affect play.

Critical reaction caused Atari to have second thoughts about the project. Reluctant to release any product not fully up to its high standards, the game-maker decided it would be better to work on the concept some more before putting its reputation on the line.

The best guess is that, in light of Atari's enviable track record, it won't be too long before true holographic games become a reality.

Odyssey Outlook

★ Odyssey now out from under Magnavox and operating as a separate division of North American Philips will popularize its programmable videogame system by staging tournaments within the next 12 months. Likely to be first is the search for the land's best **UFO** player. So far, reports the company, no one has come forward claiming a score of more than 800 on this deceptively difficult cartridge. Anyone out there beat that?

★ **Quest for the Rings,** which you can read about elsewhere in this issue of **Electronic Games,** turns out to be only the first of a projected trilogy of board-game/videogame hybrids. Next up is **Conquest of the World,** a military strategy game. Odyssey is keeping mum about the nature of the third game, but players will be satisfied if it's as good as **Quest . . .**

★ A batch of promotional items and accessories for Odyssey fans are being offered by the videogame-maker. These include **Quest for the Rings** posters and t-shirts—both beautifully done—and a clear plastic holding tray for the Odyssey² console joysticks and up to 12 game cartridges. See your local Odyssey dealer.

★ Odyssey is mulling the idea of producing a magazine for devoted fans of its game system. It would contain mostly playing tips and suggestions of special ways to enhance and enrich existing games.

continued on page 73

What Has Your TV Set Done For You Lately?

Sure, watching "the tube" is enjoyable a lot of the time. But today, home entertainment is much more than just broadcast TV. Today, your TV set can bring you movies you choose yourself to play any time you like. Fun and games. Problem-solving, self-improvement, and personal security. Unique, priceless memories of family and friends. Art you create yourself. It's a whole new world . . . the fascinating world of video.

Whether you're a video veteran, a beginner just getting your feet wet, or someone intrigued with the thrilling possibilities the field offers now and for the future, VIDEO Magazine should be your guide to this world.

Every month, VIDEO will show you how to *use* your TV, not just watch it. You'll read news of and invaluable test reports on the latest video equipment. You'll find sources, previews, and reviews of pre-recorded programs to buy or rent. You'll learn helpful home taping techniques: using a video camera, lighting, dubbing in audio, creating video art. You'll profit from expert technical advice. You'll explore all the alternatives to broadcast TV available today and the developing technologies coming tomorrow.

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HOLIDAY GIFT GUIDE *for* GAMERS

Selected by the EG Staff

Fidelity Champion Sensory Challenger

(Fidelity Electronic, Miami, Fla. $375.)

Fidelity is the acknowledged champeen of the stand-alone computer chess business. With at least 95% of the U.S. market, they are incontestably number one. The **Champion Sensory Chess Challenger** is their top-of-the-line chess-playing machine. At $375, it's neither the company's most expensive nor handsomest system, but one thing is certain—it'll play you one heck of a chess game. According to Fidelity spokesman Frank Cimo, "The **Champion Sensory Challenger** has been winning chess toumaments all over the world."

★★★

Casio Game-Playing Watch

(Model No. CA-90/Casio)

While it's true that today's wristwatches do just about everything from telling time to whistling "Dixie", Casio's CA-90 adds an interesting extra to the usual catalog of functions—it plays a game. True, it's a simple program, a sequential numbers game available on most of Casio's calculators. But this is the first time a wristwatch has been able to play **any** sort of game, and it is therefore of historical importance.

★★★

Satin Space Invaders Jacket

($59.95 by the Whiz Kids/Order SI Jacket, P.O. Box AGC, Half Moon Bay, Ca. 94019/Boxed/S,M & L)

This incredibly handsome, baseball warm-up style jacket with everyone's favorite alien invader emblazoned in gold glitter on the back is guaranteed to

stop even casual gamers in their tracks! The jacket is of good quality and the artwork is magnificent. For the gamer who **truly** matters.

★★★

Merlin
(Parker Brothers)

This is the single best selling hand-held in the field, according to its manufacturers, and the reason is almost certainly its versatility. **Merlin** is actually six different games. **Tic Tac Toe, Blackjack 13, Magic Square, Mindbender, Echo,** and **Music Machine.** This adaptability gives **Merlin** the edge over even the most intriguing single game hand-helds.

★ ★ ★

Pocket Simon
(MB Electronics)

This is the take-it-anywhere version of the ever-popular color sequence game. It's the size of a typical hand-held game, has three game options and four skill levels.

For anyone who doesn't know, the game involves four different colored quadrants on a rounded surface, each producing a separate musical tone. **Simon** begins by lighting one of the quadrants and sounding its note. You do likewise. **Simon** then produces **two** tones, which the player must similarly reproduce, and so on in sequence until you eventually blow it.

★ ★ ★

Space Invaders T-Shirt
(Downeast Trading Co., 737 Warburton Ave., Yonkers, N.Y. 10701/$6.99)

This is it, gamers, the one and only, **oh**-fishul, Taito-approved **Space Invaders** t-shirt. Made of 50/50 polyester and cotton with a high, ribbed crew collar, this beautiful silk-screen shirt comes in red, royal blue and black and in sizes S,M,L and XL for adults, and in medium or large, on royal blue, for kids.

The shirt front shows the famous Taito playfield with the game title. The Plastisol silk-screening process will keep your little aliens from chipping off in the wash.

★ ★ ★

The Children's Discovery System
(#1605/Mattel Electronics)

This tiny computer, with 2K resident memory, has a multi-function keyboard, music, typing and art modes—and it's all designed for the young child just learning about computers. The CDS offers a monoplane alpha-keyboard with numeric overlay, its own built-in LCD (Liquid Crystal Display) monitor and, as of now, eight cartridges which plug directly into this programmable system.

★ ★ ★

Home Bingo Machine
(Imaginamics)

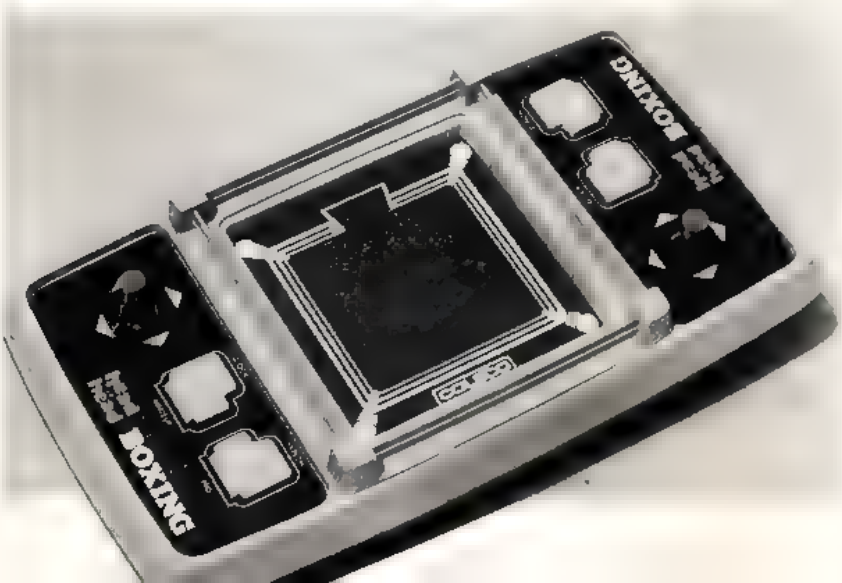
Electronic Bingo is available in two sizes. The smaller version is called **Exec-U-Play Bingo,** and the big boy is **Electronic Super Bingo.** These home games can be played by anywhere from two to two hundred people and are part of a game series featuring electronic versions of dice, roulette and slot machines.

☆ ☆ ☆

Head-to-Head Boxing
(Coleco) Price: Not available

The latest game to bear the famed head-to-head designation shows why that name is so respected by gamers. Arcaders maneuver LED pugilists around the squared circle with a tiny plastic joystick and throw punches by hitting a pair of glove-shaped buttons. The referee not only escorts one of the fighters back to his corner after each round, but even raises the victor's hand in triumph at the end.

☆ ☆ ☆



Alien Invaders/Galaxian Mini-Arcade
(NPI Electronics) Price: Not available

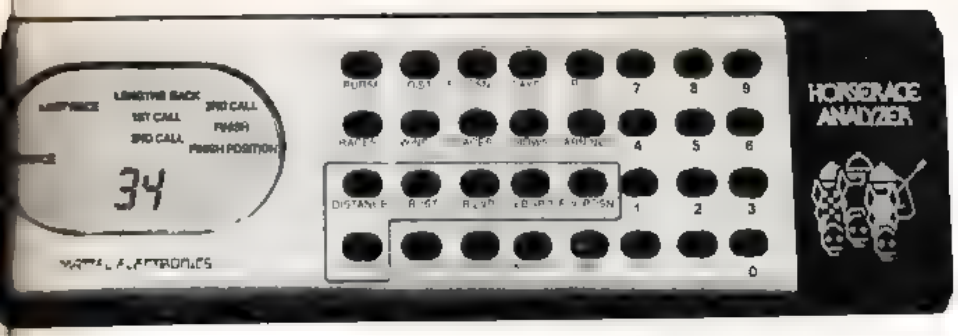
This revamped edition of last year's NPI **Space Invaders** is bound to be one of this holiday season's hottest handhelds. This mini-game boasts excellent sound effects, digital display, one- and two-player modes, high-score listing and a five-inch screen. It even has a mystery ship feature like the full-size machines!

☆ ☆ ☆

The Apple-Crate
(Distributed by Softsel, 4079 Glencoe Ave., Marina del Rey, Ca. 90291) Price: $49.95

Computerists are always looking for a place to put their machine and peripherals. The solution is usually a floor strewn with disk drives and ivy-like electrical wiring. Now comes the solution, the Apple-Crate. Made by a leading speaker cabinet manufacturer, the dark wood-style finish is scratch- and stain-resistant. More important, it provides slots for the computer and a pair of disk drives. The monitor perches neatly on top.

☆ ☆ ☆



Horse Race Analyzer
(Mattel Electronics) Price: Not available

Tired of betting good money on animals that never bet a nickel on you? Then here's the ticket to beating the system. Mattel's **Horse Race Analyzer**. When used in conjunction with a daily tip sheet, this hand-held microcomputer puts heavy-duty brainpower behind those picks.

☆☆☆

Electronic Detective
(Ideal) Price: $40

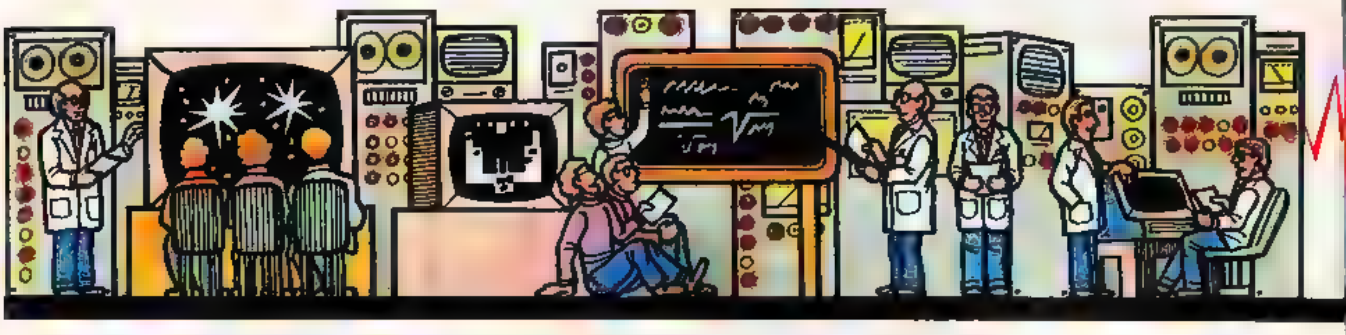
One of the very first electronically augmented boardgames, it is somewhat similar to the non-electronic detection game, **Clue**. A microcomputer capable of creating 130,000 crime variations is grilled by each player in turn. It's no snitch, though. Detectives must fit scraps of information together to piece together the whole sordid story.

☆☆☆

Lexor
(Selchow & Righter) Price: Not available

This electronic version of Scrabble allows up to four players to race against the clock to see who can get the most word mileage out of the seven letters shown on the LCD screen. There's even a solitaire version in which the gamer works with 14 seven-letter "racks."

☆☆☆

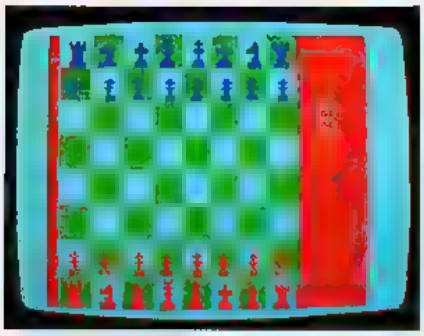


by Jethro Wright III

Tandy Unveils Color Computer

A new computer from Tandy—and a color one at that—is always big news, especially to a vocal TRS-80 cheerleader like myself.

Physically, the Color Computer is similar to its two predecessors, the TRS-80 Model I and Model II. Apart from the most obvious addition, color graphics, there are some less obtrusive differences worth noting.



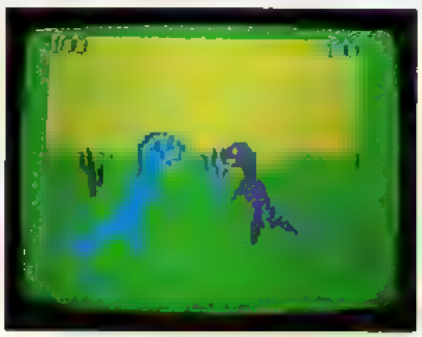
CHESS

For one thing, the basic CPU/keyboard case is large enough to provide room for interfaces for all the peripheral devices designed for use with the system. Gone is the cumbersome—and expensive—expansion interface of the Model I. Hooray! Built into the machine is a faster, dual-speed cassette interface for long-term storage of user-entered or prepared software programs. Also included is a serial interface to facilitate connecting the Color Computer to a disk drive, printer or modem. The unit also features two joystick ports for use when playing computer games, as well as an output for connecting the system to a TV set.

When the hardware "hackers" out there crack the Color Computer's case, they'll be in for a treat. The excitement starts with the CPU (central processing unit). Tandy has switched from its standard workhorse, the Z-80 microprocessor to the more advanced 6809. Internally, this processor looks a lot like a 16-bit minicomputer. This translates into higher speed and greater programming flexibility than can be realized even with the more expensive Model II/III.

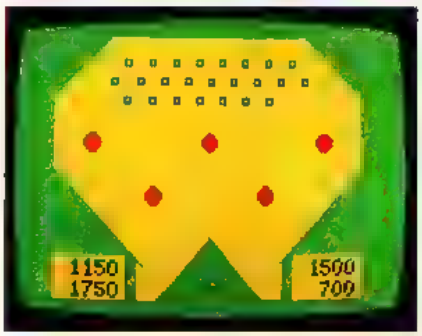
Regrettably, the improvement has almost eliminated any chance of using any of the mammoth number of software programs developed for the earlier Model I. That shouldn't be a real drawback, however, if Tandy achieved the same degree of acceptance with the Color Computer as it did for its previous home computers.

Moving on, there is the video chip (6847). This LSI wonder delivers eight basic colors and programmability in a single package. Gamers who have felt shackled by the black and white output of the TRS-80 series can now fill the screen with green, blue, yellow, red, buff, cyan, magenta and orange. Besides being simple to use, this chip confers the added bonus of improving the computer's reliability through the reduction in the number of parts that can fail.



DINO WAR

In its normal display mode, the Color Computer can present 16 lines of 32 alphanumeric characters each. Although the system will print lower-case letters in reversed, black-on-green form, the Color BASIC programming language resident in the smaller 4K version only understands capitals.



PINBALL

Many home arcaders will want to look into the more powerful 16K Color Computer, which has extended BASIC resident in ROM. It makes it much easier to manipulate the color graphics. For example, extended BASIC makes it possible to draw a circle by simply indicating the center, radius and color desired.

Now for some bad news. Since Tandy has aimed the Color Computer at the home market, it has limited RAM (random access memory) to 16,000 bytes. For some reason, computer manufacturers don't think home computerists need very much memory. In any case, the ROM card connector allows those who want to make the expansion that Tandy didn't think they'd need to do so. A few alternate hardware vendors are already offering such expansion options. Hopefully, Tandy will eventually get the message, too.

The manufacturer wisely elected to stick with a winning hand and turned to Microsoft to develop the BASIC interpreter for the Color Computer. In addition to sophisticated sound, graphics and joystick control, there is some compatability with the Level II/Model III BASIC, so that programs originally written for these machines should transfer to

TEST LAB

the Color Computer without a great deal of difficulty.

For the more sophisticated user—like myself—the Color Computer has a couple of serious shortcomings.

1. While the graphics are satisfactory, they lack the high resolution of a comparable machine such as the Atari 400/800. The number of colors available on the screen at any given time also creates a bottleneck. The unit only allows certain pre-defined color sets in each of its display modes.

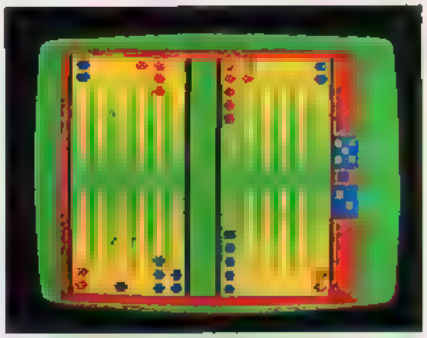
2. The joysticks are, in a word, lousy. Here, Tandy's attempt to cut corners has totally failed. The response and feel are poor, and they don't automatically return to a neutral position. The joysticks are also physically small, making them less convenient to use than the ones with which most gamers are familiar.

Overall, the TRS Color Computer is a good system. The majority of its features

TRS-80 Color Computer

reflect Tandy's maturity as a manufacturer of computers. That means it's a satisfactory and highly usable machine for the home computerist.

Considering the investment that purchasing a home computer requires, it's a relief to know that your new machine will not become a "closet queen" because the manufacturer failed to make a commitment to its continued support with software (and hardware, too, naturally). Tandy has only released a few games on ROM cartridges thus far, but its track record for sticking behind its products promises much for electronic arcaders over the next few years.



BACKGAMMON

TRS-80 Color Computer at a Glance

Price: $399 (4K)
$599 (16K)
Weight: 7.75 lbs.
Dimensions: 4 in. x 14.5 in. x 13.5 in.
Microprocessor: 6809
Color: 8 (plus black)
Sound: Five-octave, 12-note scale
Keyboard: 53-key calculator type
ROM: 8K (Color BASIC)
16K (Extended Color BASIC)
RAM: 4K or 16K bytes
Programming Language: BASIC
Monitor: Hooks to any TV set with RF unit (provided)
Games (on ROM cartridges): Chess, Quasar, Pinball, Checkers, Math Bingo, Music

computer glossary

Auxiliary Storage: Devices used for saving programs when the system itself is turned off. Since RAM loses its contents when the machine is powered down and ROM can only be programmed by the factory, auxiliary storage keeps programs between operating sessions. It can't be used instead of RAM or ROM, however, since it doesn't operate as fast as the CPU.

CPU: Central Processing Unit. This is the microprocessor—or electronic brain, if you will—that lies at the heart of every computer.

Disk Drive: An auxiliary storage device that works like a cross between a phonograph and a cassette recorder. By using plastic disks coated with a magnetic surface, such drives are faster and more reliable than cassette storage.

Interface: The part of the computer that permits the attachment of peripheral devices. These include cassette recorders, joysticks and a connection for a TV set or monitor.

Modem: Modulator-demodulator. A piece of equipment that allows computers to communicate with each other over telephone lines.

Interpreter: This translates programs from human-readable form into a series of codes the computer can understand. This makes using a computer a lot simpler for first-time programmers.

RAM: Random Access Memory. This is the internal memory the computer actually uses when running a program. It can be revised or read an infinite number of times.

ROM: Read Only Memory. This type of memory is also internal to the system, but it cannot be altered by the computer operator. Its contents are fixed at the factory and can't be changed. Most computer games bought in ready-to-play form fall into this category. ★

Q&A

This column will answer any questions readers may have about the often-complex world of electronic gaming. Since this is the first issue of a brand new magazine, however, we're going to start with some of the questions we've been asked about this subject in the past. In future issues, we'll be fielding queries sent in by you readers. And don't worry about stumping your friendly old Game Doctor; if I don't know the answer, I know how to get in touch with folks who do.

And now, on to the first question!

Q: Do videogames damage television sets?

A: No, no a thousand times no! All the programmable videogame and computer systems covered in **EG** use sophisticated color-shifting routines that keep any single hue or image from remaining in the same spot on your TV screen for any length of time.

You will often notice that when your videogame system is on, but not in an active mode, the background colors change periodically. This prevents the phosphors from permanently "imprinting" an after-image on the screen.

Worry about damage to the TV set dates from the infancy of the hobby. Alas, many companies that produced "hard-wired" videogames in the past were unaware of the potential difficulty. As a result, many sets wound up with a ghostly white line running down the middle of the picture tube, a memento of all-night **Pong** sessions.

But you can relax. That just isn't a problem with modern systems.

Q: Atari's Star Raiders **is my favorite game for the 400 computer. I'd enjoy it a lot more, though, if I could figure out how to make my spaceship dock with the Starbase for refueling. I've followed the instructions to the letter, but nothing happens. Am I doing something wrong, or is my ROM cartridge defective?**

A: Odds are that your ROM cart is in perfect working order. It's the instructions—so precise in most respects—that are a trifle out of whack. It's actually quite easy to achieve docking orbit in **Star Raiders** once you understand the procedure and get the knack.

Any confusion arises in the description of how to set the ship's velocity in normal space. Although a couple of other buttons yield an apparent speed of zero, only pushing the "0" (zero) key actually brings the craft to a 100% dead stop. Once that's clear, the rest of the process is pretty straightforward.

Use the coordinates provided by the computer to bring your ship as close to the starbase as possible. Slam on the brakes by punching "zero" on the console. Then center the starbase in the crosshairs. At this point the magic words "Orbit Established" will flash on the screen, a tiny shuttle craft will putter out to dispense fuel, and your ship will be ready to return to the spaceways!

And if you think **Star Raiders** is fun now, wait until you try it incorporating docking!

Q: I have problems every time I try to load a game cassette into my computer. Sometimes it runs for awhile, stops suddenly and flashes an error message. What am I doing wrong?

A: Take heart, valiant gamer. The fault lies not in yourself but with the varying lengths of "leader" (blank tape) software suppliers use in making their cassettes. One sure way to lick this problem every time is to first run your tape through an ordinary audio cassette recorder. When you hit the tell-tale high-pitched squeal of the program's lead-in, stop the recorder. Rewind the tape a fraction of an inch by hand, reinsert it in the computer's cassette loader and try again.

Q: I thought all computer games on cassette were written in BASIC computer language. But the Atari 400/800 version of Space Invaders **loads directly into the machine without the assistance of the BASIC ROM cartridge. How is this possible?**

A: Let's first correct your "basic" misconception. BASIC isn't the only language for writing computer games. BASIC is simply the most popular—at least for home use—of several languages created to help humans communicate with computers in a way we find at least semi-comprehensible.

Each type of microprocessor, however, can also "speak" another tongue, called "machine language" that is not directly understandable by people. Since **Space Invaders** is, in fact, written in machine language, no BASIC interpreter is needed to help the computer decode the message.

Incidently, machine language has several advantages over BASIC. The most notable, from the point of view of gamers, is that the computer can "read" it a lot faster. This greatly speeds up on-screen action, especially improving joystick response time.

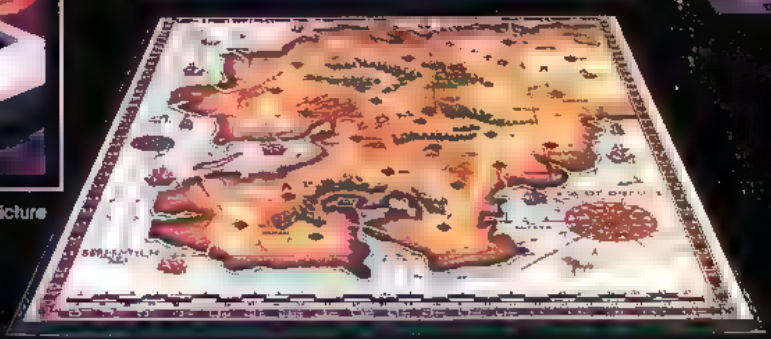
Also, computer experts are constantly developing new languages. A language called PASCAL is being used to write several upcoming new games, according to reports, and this promises some exciting breakthroughs, particularly in the area of game graphics. ★

That empties the doctor's question box for this issue, gang, but now it's your turn! Not only will **EG** be printing—and answering—the questions you submit beginning next issue, but I'm even going to provide a little extra incentive. I'll send an **Electronic Games** t-shirt to the reader who poses the most interesting question each issue.

A Computerized Master Strategy Game by Odyssey²

The Quest For The Rings

Simulated TV picture



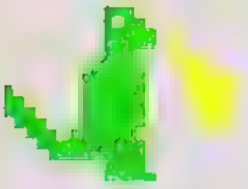
YOU ARE ABOUT TO ENTER AN ALTERNATE WORLD WHERE DREAMS - AND NIGHTMARES - COME TRUE WITH FIRE BREATHING REALITY!

A Computerized Master

The
For Th

Ten rings of power lie hidden within the Dark Lands of the evil Ringmaster. In gloomy dungeons. Crystal caverns. Molten infernos. And mysterious shifting halls. Each posing its own challenge. And its own threat.

Each ring is guarded by the treacherous minions of evil that lurk within these halls of doom. Menacing Orcs and



Dragons

Firewraths. The loathsome Spydroth Tyrantulus Doomwinged Bloodthirsts. And hiddeous firebreathing dragons

Wizards

As a member of a small company of legendary heroes, you embark on the supremely dangerous search for the rings. The Quest begins as you summon the Heroes to the screen using the computer and keyboard overlay And whichever identity you choose will equip you with potent weaponry needed to battle the armies of the Ringmaster. As a warrior, you carry an enchanted sword. As the wizard, you cast formidable spells. As the mysterious Phantom, you can walk through walls. And as the Changeling, you wear the cloak of invisibility.

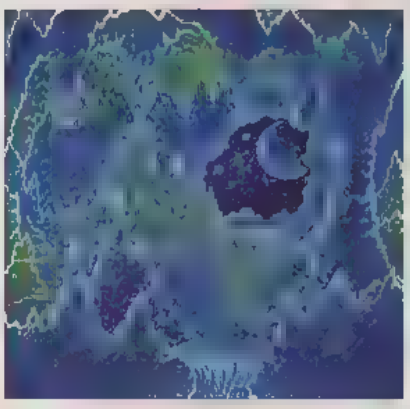
« N A P Consumer Electronics Corp

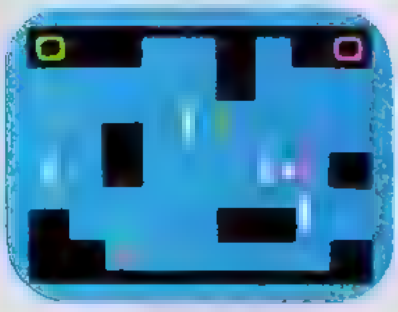
Game Components

1 Odyssey^2 Master Strategy Game Cartridge

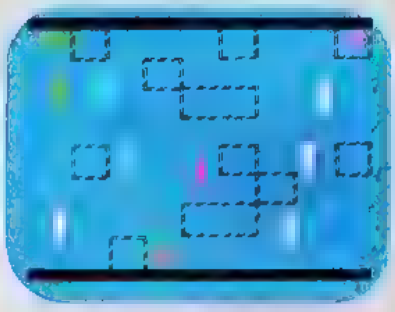
1 Keyboard Overlay

Heroes search from castle to castle in a quest for the ten rings of power, hidden on the gameboard by the Ringmaster. You'll encounter The Dungeons — castles built by men, then captured by the Ringmaster's armies The infernos — towers of molten lava that will snuff out any player who comes in contact with them. The Crystal Caverns — with invisible walls. And The Shifting Halls — that conspire to block the Heroes by changing positions every few seconds





Dungeons



Crystal Caverns

A Computerized Master Strategy Game by Odyssey²

The Quest For The Rings

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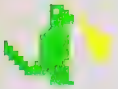

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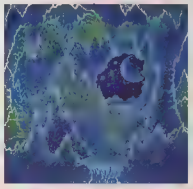

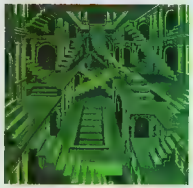

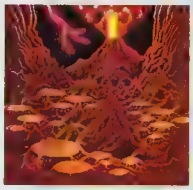

Dungeons

Crystal Caverns

Shifting Halls

Infernos

Spydroth Tyrantulus

Warriors

Upon entering the Dark Lands where a ring is hidden, the Ringmasters minions begin their attack. Obtaining the ring becomes a difficult task. Requiring courage and even self-sacrifice, as players work together to outwit and outfight the Ringmaster's monstrous Nightmares in exciting on-screen action. If all ten rings are captured before the sands of time run out, the Ringmaster has been defeated. If not, he has won.

The Quest for the Rings is the first of the all new Master Strategy Series from Odyssey. Applauded as a first by true game enthusiasts, Quest for the Rings offers the combined fast pace and excitement of on-screen action with the intense strategy of gameboard competition.

Doomwinged Bloodthirsts

And thus mankind's quest for rings of enchantment continues. As it has for thousands of years. Many finds have been rumored, yet few have ever been documented. And though no recent discoveries of such rings can be authenticated, the excitement and mystique surrounding their existence is ever strong and ever present. Concluding that man's Quest for the Rings is still very far from over.

Quest for the Rings is here now. Waiting for you to accept the heroic challenge and adventure it offers . . . in the relative safety of your own home. Don't wait. Begin your own exciting Quest for the Rings today!

© N A P Consumer Electronics Corp

Strategy Game by Odyssey^2

Quest for the Rings

Spydroth
Tyrantulus

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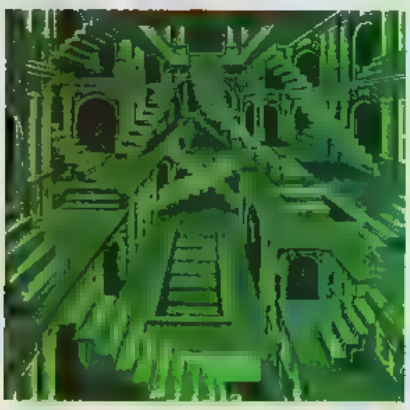
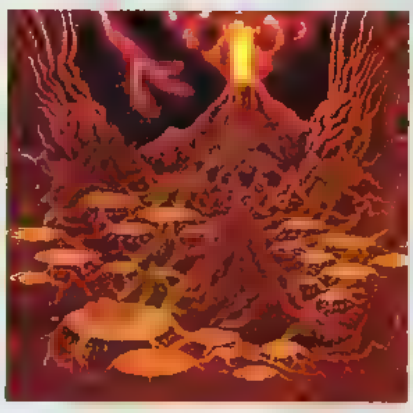
Possessions

Ring

Doomwinged Bloodthirsts





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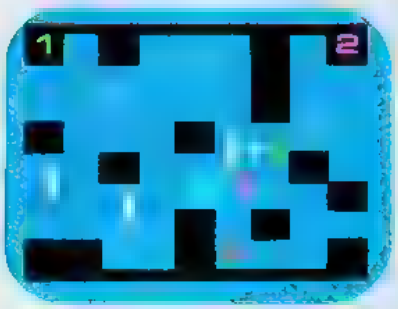
Shifting Halls



Infernos

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"THE QUEST FOR THE RINGS" ADDS TO THE NUMBER OF EXCITING ODYSSEY² GAMES.

"The Quest For The Rings" signals the beginning of the Master Strategy Series — and a highly advanced era in video game systems. Right now it's unique to Odyssey².

Players combine gameboard strategy with on-screen video action through use of the computer keyboard.

It's just one of many exciting Odyssey² games now available. Others range from sports to arcade to educational games.

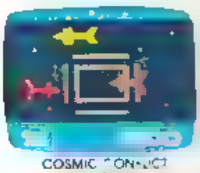
And more new games are under development. As each one is introduced, it will not only add to the selection, but will generate added enthusiasm and interest in Odyssey² and its library of game cartridges.

To keep customers coming back for more. To keep The Money Machine cranking toward your million-dollar goal.

ARCADE

SPEEDWAY

SLIN OUT



COSMIC [illegible]
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AJ9400

SUB CHASE

ARMORED ENCOUNTER

LAS VEGAS BLACKJACK
AJ9401

AJ9403

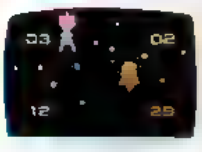
INVADERS FROM HYPERSPACE
AK9414

THUNDERBALL
AK9415

WAR OF NERVES
AK9417

SHOWDOWN IN 2100 A.D.
AK9416

HELICOPTER RESCUE



OUT OF THIS WORLD

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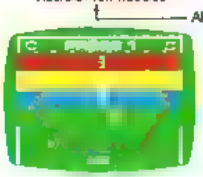
ALIEN INVADERS PLUS
AA9428



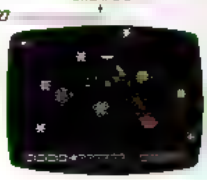
BLOCKOUT

BREAKDOWN

AA9427

PACHINKO
AA9425

SLOT MACHINE
AA9426



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AB9430

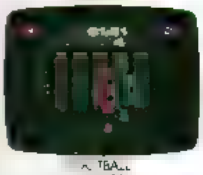
SPORTS

BASEBALL
AJ9408

BOWLING

BASKETBALL

AJ9404



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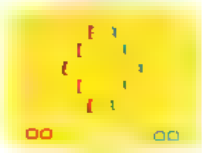
AJ9402

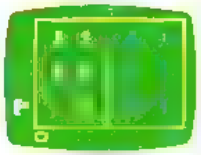
COMPUTER GOLF
AJ9410

ALPINE SKING
AK9418

HOCKEY



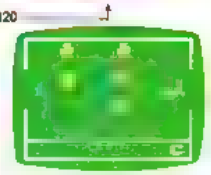
SOCCER



VOLLEYBALL
AA9422

AK9420

POCKET BILLIARDS
AA9424



ELECTRONIC TABLE SOCCER
AA9423

I'VE GOT YOUR NUMBER
AK9413

EDUCATION

[illegible]MAKER

LOGIX

BUZZWORD

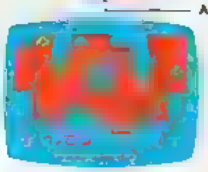
AJ9407

MATH MAZE

ECHO

COMPUTER NITRO
AJ9406

AJ9405



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AB9431

TAKE THE MONEY AND RUN
AJ9412

CRYPTO-LOGIC
AJ9400

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STRATEGY SESSION

HOW TO ZAP MORE SPACE INVADERS

by Frank Tetro Jr.

The only thing that's more fun than playing electronic games is playing them well enough to beat your friends and relations more often than they beat you. Losing gracefully may qualify as polite behavior, but winning with style is a lot easier on the nerves.

This column intends to help you upgrade the quality of your play. Each month, I'll analyze a couple of the most popular electronic games and pass along some hints to help you score higher at them.

To start things off, let's take a closer look at a couple of certified videogame classics.

Space Invaders. In the Atari VCS version, the presence—or absence—of the protective shields determines the best strategy. After destroying the first three hordes of alien invaders, players must adjust their tactics to allow for the lack of shelter against the rain of bombs from above.

There are dozens of methods for eliminating the first three sets of invaders, but here's one that seems to work for most people.

As soon as the game begins, slide the horizontally mobile cannon to the extreme right and destory the vertical column. Then zip over to the far left and knock out that vertical column.

At this point, the mother ship will appear at the top of the screen. Destroy it. Next, swing back under the aliens and zap those in the two lowest horizontal rows.

This leaves the player with a tightly grouped field of 16 invaders. Wait approximately seven seconds, and you'll be rewarded by the appearance of another mystery ship. After collecting bonus points for eliminating it, wipe out the remaining attackers to bring on the next batch of nasties.

The real test begins with the fourth wall, since no shields stand between the defender and Earth's would-be conquerors. Starting at the left edge of the playfield, expunge the bottom two creatures in each column as you move the cannon to the right.

Eliminate the vertical column at the extreme right, whizz back across the bottom of the playfield and do the same to the column on the far left. After wiping out the column to the immediate right of the one that just bit the dust, just 12 aliens will be left. Right about this time, the mother ship should be making another one of its flights. After dealing with it in the customary manner, destroy the remaining aliens in whatever order seems best.

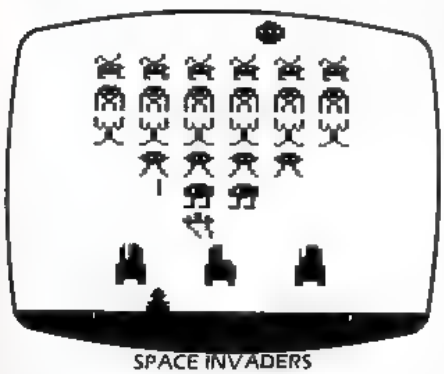
The next batch of aliens will start even lower. However, all the walls after that will begin from the same point. The strategy outlined previously will still work just fine.

Arcaders who've practiced quick shooting should be able to blast aliens until their hands get tired.

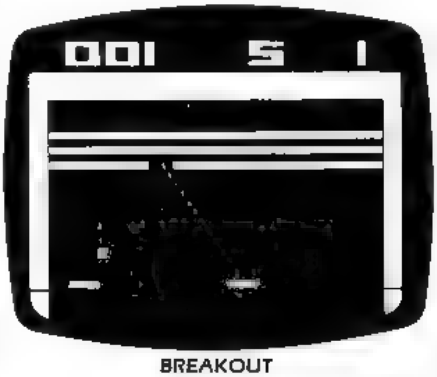
Breakout. The object here is simple: destroy a multi-layered wall, one brick at a time, using a horizontally movable paddle to send the ball careening at the target. To a great extent, **Breakout** is less a game of strategy than a stern test of motor skills and hand-eye coordination. A player without a definite plan can still score well by keeping the ball bouncing around long enough.

The following suggestions should

continued on page 72



SPACE INVADERS



BREAKOUT

BREZ
1981

CAN ASTEROIDS CONQUER SPACE INVADERS?

Ladies and gentlemen, on the right, from California, the challenger, ASTEROIDS! On the left, from Japan, the champion, SI!

You hear the topic discussed wherever electronic gamers congregate. On lines in coin-op parlors and between rounds in front of programmable home arcade systems, players debate the same intriguing question: "Which is better, **Asteroids** or **Space Invaders**?"

It's certainly easy enough to make a good case for either title. Some arcaders love the symmetry of **Space Invaders** while others prefer the unpredictability of **Asteroids**. Both have garnered popular and financial success in every area of electronic gaming—videogames, commercial arcades, computer games and stand-alones.

Will **Asteroids** replace **Space Invaders** as number one in the hearts of arcaders? The seach for the answer to this question must take us back to that wonderful year 1978 for a little history lesson.

The year 1978 was very, very good for electronic gaming.

That's when both the Atari VCS and Odyssey² appeared, generating renewed interest among **Pong**-weary players with their programmability. This concept of a single system capable of playing an unlimited selection of games revolutionized the entire hobby of arcading.

Meanwhile, another revolution was beginning in Japan. A then-small Pachinko company introduced the first model of a new coin-operated videogame.

Taito, Ltd., called it **Space Invaders**. Almost immediately, it began to exert a profound influence on the island nation.

Within months, Howagiken Ltd., Japan's largest Pachinko manufacturer, closed its doors for good. By the end of the first year, Taito had installed over 100,000 **Space Invaders** machines and raked in over $600 million, the Bank of Japan had tripled production of 100-yen pieces and the Japanese PTA had tried to banish **Space Invaders** on the theory that it inspired kids to play hookey.

Word of this incredible success story soon reached American shores. Midway, the Bally coin-operated game division, bought the U.S. rights to **SI**, and a fad was on its way to becoming a lifestyle. The hypnotic progression of the invading aliens enthralled gamers everywhere. The now-familiar march beat that accompanies SPACE INVADERS

can ASTEROIDS conquer

and graphics fr.ls astonished those who thought Pong defined the videogame universe. Finally, players had an electronic game that went beyond the old ball-and-paddle configuration.

Sensing the desire of American arcaders for a home version, Atari acquired the programmable videogame rights to **Space Invaders** from Taito in 1980. Adding **Space Invaders** to its library of cartridges paved the way for Atar's dom nance of the home videogame market. This one overwhelmingly desirable title sold the entire VCS system in many cases.

Atari's SI tournament kept interest in the game at a fever pitch. Finally, all those closet Han Solo's would have the opportun.ty to strut their joystick stuff in public. More than 10,000 eager players showed up for the regional competitions in San Francisco, Chicago, Ft. Worth, Los Angeles and New York City.

Atari staged the competition's finals in a large meeting room in the headquarters of its parent company, Warner Communications in the B g Apple. B.ll Heineman, amid whirring recorders and clicking cameras, emerged from the fray as the first U.S. **Space Invaders** champion.

The prizes on display in the adjoining press room included an Atar 800 computer system and a lovely cocktail version of the company's latest coin-op hit, **Asteroids.** So as **SI** reached the zenith of its popularity, the heir-apparent waited quietly next door, getting an unexpectedly large amount of attention from media people covering the tourney. They, like most arcade-goers, found **Asteroid's** non-linear design and detailed graphics irresistible.

So **Asteroids** was already stealing some of the thunder from the older game. Within weeks, the struggle between the two titles for the top spot in commercial arcades began in earnest.

Bally/Midway, which felt **SI** had reached the end of the line as a coin-op moneymaker now that it was available in the home version, let its U.S. rights lapse. The company instead concentrated on developing a new game in the **SI** mold, but with more color and animation.

The result was **Galaxian**, a souped-up **Space Invaders** loaded with extra features guaranteed to keep the quarters coming. These invaders had wings, and not just for show, either. Periodically, a trio of **Galaxian**'s aliens breaks off from the main force and swoops down the screen raining bombs on the defender.

Asteroids differs from **Galaxian** in that it was never intended to be a son-of-**Space Invaders**, but rather an entirely new game. Where the action in **SI** is largely symbolic—cute aliens marching down the sky in perfect formation—**Asteroids'** program is more realistic in both concept and execution.

The game plops the arcader down smack in the middle of a deep space asteroid field. By manipulating the machine's five action buttons, pilots can rotate the ship in either direction, move forward by applying thrust, zip into the temporary safety of hyperspace and, most importantly, fire the laser that chops even giant space rocks down to size.

Atari employed a special process for **Asteroids**, called Quadrascan, which is capable of rendering a solid line of unbroken brightness. The difference between Quadrascan and the earlier Rasterscan method is like the difference between a connect-the-dots puzzle and the smooth lines of an etch-a-sketch. Quadrascan also makes it possible for objects to drift onto the screen from any direction and at variable speeds. Even without color, Atari engineers are currently hard at work on color Quadrascan—this new type of monitor helped **Asteroids** make a smashing visual impact.

How successful is **Asteroids**? Let's look at the record it has compiled:

- ★ Since October 1979, when Atari's Tipperary, Ireland, plant shipped the first machines, more than 70,000 **Asteroids** units have gone into service worldwide.
- ★ **Asteroids** is one of only two coin-op games that have succeeded well enough to justify a second, "Deluxe" edition.

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(Care to guess what the other is?)

- ★ **Asteroids** is one of the longest-running hits in the history of commercial arcades. Six months at or near the top of the sales chart is considered excellent, but the game is already starting its third successful year with no end in sight.
- ★ **Asteroids** led all coin-op games in gross revenue in 1980, pulling in as many as 10 million quarters a day!

Unbeknownst to Atari, however, a time bomb ticked away buried deep within the complicated Asteroids program. As an extra attraction, the designers of the original version added a "bonus ship" feature that enabled skillful players to win another life. Destroying the small saucer that periodically puttered across the screen earned the arcader an extra ship.

Asteroids performed superbly during the USA multiphase test period. It was only after the machines had filtered into every nook and cranny of American life the difficulty surfaced.

History unfortunately doesn't record the name of the first arcader who fought rather than fleeing when the saucer showed up. This approach worked well—too well, some would say. Just ask Greg Davies of Fresno, Cal., who piled up 15,449,950 points with one quarter. (David Jeanne shattered this record on June 14, 1981, accumulating 22,254,110 points at the Rainbow Roller Rink.)

"Whenever I wanted to take a drink or go to the bathroom," Davies recalls, "I piled up a bunch of bonus ships." Greg would finish his business and then zip back to the machine before the supply of spares gave out.

The idea of a gamer monopolizing a machine for over 30 hours with a single 25¢ piece made commercial arcade owners howl. Some manufacturers even started doing a lively business in modification kits aimed at adjusting the **Asteroids** program.

At this point, Atari itself decided the time was ripe for a new edition. After all, **Asteroids** was as popular as ever, and there were technical innovations the designers were itching to try.

Deluxe Asteroids, released last March, embodied several changes. The most obvious is that Atari laid the quadrascan monitor on its side so that it could project its image on a tilted, 50%-reflective mirror. A second screen behind the mirror helps create a 3-D effect.

Deluxe Asteroids also replaces the hyperspace option with shields that can only be energized for short periods of time. Killer satellites and "smart" saucers are also on hand to bedevil players.

Atari designers wanted to produce a more challenging game. At first, they actually did the job too well. "The game originally tested as being too difficult," explains Frank Balouz of Atari's coin-op division. "We had to adjust it down a little."

And what you may wonder, was happening with **Space invaders** while **Asteroids** was setting the electronic arcade world on fire?

The rights reverted to Taito, which now marketed **Space invaders** in this country. In fact, SI is undergoing a coin-op resurgence right at the moment.

Space invaers is the first post-Pong videogame to attain legendary status in the nation's electronic fun palaces. It's likely that every sizable arcade will always have **SI** or one of its descendants like **Galaxian**, much as arcades of an earlier era always included a baseball machine and an automated gypsy fortune-teller.

So the question remains: Can Asteroids conquer Space Invaders and replace it as the leading electronic game? A New York City arcade operator provides what may well be the best answer: "They peacefully co-exist," he explains. "I've got plenty of room for both. But it's funny, people who have **Space Invaders** at home still occasionally like to play it here. People love **Asteroids**, but they also love shooting up those aliens."

Let's call the battle between **Asteroids** and **Space Invaders** a draw. Both of them are certainly winners in any gamer's book. ★

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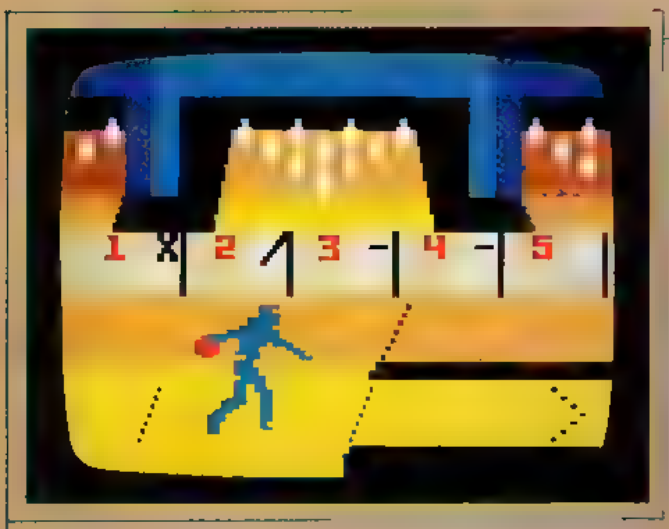


BOWLING

STAMPEDE

by Bill Kunkel
and Frank Laney Jr.

One of the most exciting aspects of electronic arcading is the number of new games constantly heading to market. It may be hard to believe, but as great as electronic games are today, even more fascinating ones are waiting just around the corner to dazzle and delight us.

Making predictions is always a risky business, and it's even chancier when the subject is a hobby as explosively innovative as electronic gaming. Fortunately, it isn't necessary to resort to a crystal ball—or even a super-computer—to find out what's barrelling down the road toward us in the near future.

Thanks to the existence of industry trade shows, it's possible to get an advance peek at upcoming videogames, stand-alone devices and computer software without bringing out the Ouija board. For those unfamiliar with trade shows, they're mammoth business conventions where manufacturers preview their newest products for the nation's shopkeepers. The games we'll be buying this holiday season—and next summer—grabbed center stage at the Chicago Consumer Electronics Show (CES) held last summer.

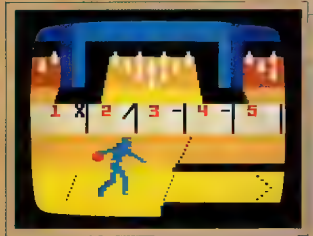
Ordinary consumers can't get past the front gate, but fortunately **Electronic Games** was there to get the lowdown.

Although there are numerous videogames just reaching the stores for gift-giving, the flood of new titles will slow

Gamers give Atari's new Remote-Control VCS a workout at CES

Oh, what a tangled web we weave... The latest from Atari: a wireless VCS that ends vine-like clutter forever!

What's next for electronic games?



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Atari, for example, has decided to ease up on videogame introductions until they can make enough copies of their new superhits—**Missile Command, Warlords** and **Asteroids**—to satisfy America's legions of VCS owners.

Which is not to say that the Sunnyvale, Ca. giant is going to sit on its corporate hands. Atari used the Consumer Electronics Show to premiere its Remote Control VCS. Not only does this innovative system eliminate the strangling spaghetti of wires that always seems to surround videogame consoles, but it offers some other attractive features as well. The wireless controllers, for example, function as both paddles and joysticks, which will make changing cartridges easier in many cases. They even let the arcader select the desired game variation or start a new round of play without straying from that comfy chair across the room.

The big breakthrough in videogame software is the "souped up" cartridge. Atari, Activision and Odyssey² will all be introducing them soon. Up to this point, ROM cartridges for videogame systems have included 2,000 bytes (2K) of programming information. The manufacturers have begun to equip some of their cartridges with 2K of additional memory (which accounts for the higher price tags on some of the newer games). This development will certainly lead to the introduction of more sophisticated—and entertaining—titles in the near future.

Activision is making use of extra programming power in **Ice Hockey**, its first team sports title. Designed by Alan Miller, **Ice Hockey** uses those extra bytes to attain remarkable realism. Each team consists of two on-screen players, a forward

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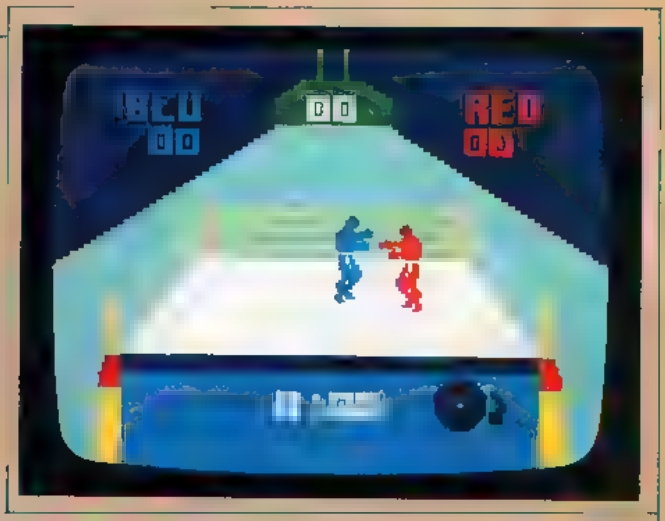

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What's next for electronic games?

and a goalie. Both are free-skating, with the one nearest the puck automatically coming under the arcader's direct control. The portion of the stick blade with which the puck is slapped determines the direction in which the shot travels. **Ice Hockey** also features stick-handling, body-checking and tripping—and the most true-to-life animation possible. One thing is missing, however. There are no officials to call penalties. "I always thought it would work better without a referee," explains true hockey fan Miller.

Stampede created by Arcade Award winner Bob Whitehead, is a completely different affair. It's a bit like the popular **Fishing Derby** turned on its side. Players direct a video cowpuncher who rides up and down the range located on the left side of the playfield. In front of him are the "dogies" who "git along" at a pretty good clip. Players must keep the cows in front of the cowboy, dodge obstacles and lasso as many animals as possible.

Although Odyssey² is bringing out a slew of interesting games, including **UFO, Alien Invaders—Plus** and **Monkeyshines**, the company's **Quest for the Rings** is the most exciting release. The first game in Odyssey²'s Master Strategy Series, **Quest** is the first hybrid boardgame/videogame in history. Utilizing a special overlay that fits on top of the console keyboard and a colorful game board, **Quest for the Rings** sends players on a fantasy adventure in a magical kingdom. Arcaders can choose to be any of four different characters, each possessing a unique special power.

Odyssey² will release its second Master Strategy Series game, **Conquest of the World**, sometime during 1982. In that one, gamers plot overall war strategy and fight tactical-level battles using tanks, jets and submarines.

Mattel still hasn't gotten the long-awaited Intellivision keyboard ready for sale, but it will bring out a wide range of new cartridges for use with the master component.

Boxing and **Bowling**, the latest additions to Mattel's library of sports titles, should be in stores in time for the holidays. Both feature the high resolution graphics that have been leaving gamers goggle-eyed since Intellivision made its debut. The animation is particularly fine in these two. The winning fighter raises his hand and does a victory dance while **Bowling** shows an automatic pinsetter clearing away the deadwood and positioning the pins for the second ball just like in a real alley.

Mattel also is releasing several games in the space/arcade category. **Astrosmash**, the most entertaining of them, is a clever combination of **Asteroids** and **Space Invaders.** The player moves the on-screen ship back and forth across the bottom of the field, shooting at—and sometimes dodging—a rain of meteors from above.

Several manufacturers of stand-alone chess-playing computers have new products which they hope will win a share of the large U.S. market currently dominated by Fidelity Electronics and its Chess Challenger line. Scisys, Novag and Tryom (already big in computer backgammon) all have new products about to hit retail stores across the land. The big attention-getters at CES were the Novag Robot Adversary, which moves the pieces with a mechanical arm, and Fidelity's gorgeous Decorator Challenger.

Mattel isn't going to neglect fans of stand-alone games in 1982. Besides new World Championship Football and Baseball hand-held units, the manufacturer is also unleashing a pair of electronically enhanced boardgames, **Dungeons & Dragons** and **Dallas.**

D&D, is, of course, based on the fantasy role-playing game that has become quite a craze in the last year or so. The most interesting feature of **Dallas** is that the computer represents J.R. and is programmed to cheat!

And that's how things look for the balance of this year and the first half of 1982. Predictions for further in the future would only be an exercise in futility, because there are now hundreds of designers working on electronic games for publication within the next 12-18 months. It's entirely likely that a youngster bent over a computer in the family garage is putting the final polish on a new electronic game that will top even the wonderful ones already poised to astound arcaders in the year to come. ★

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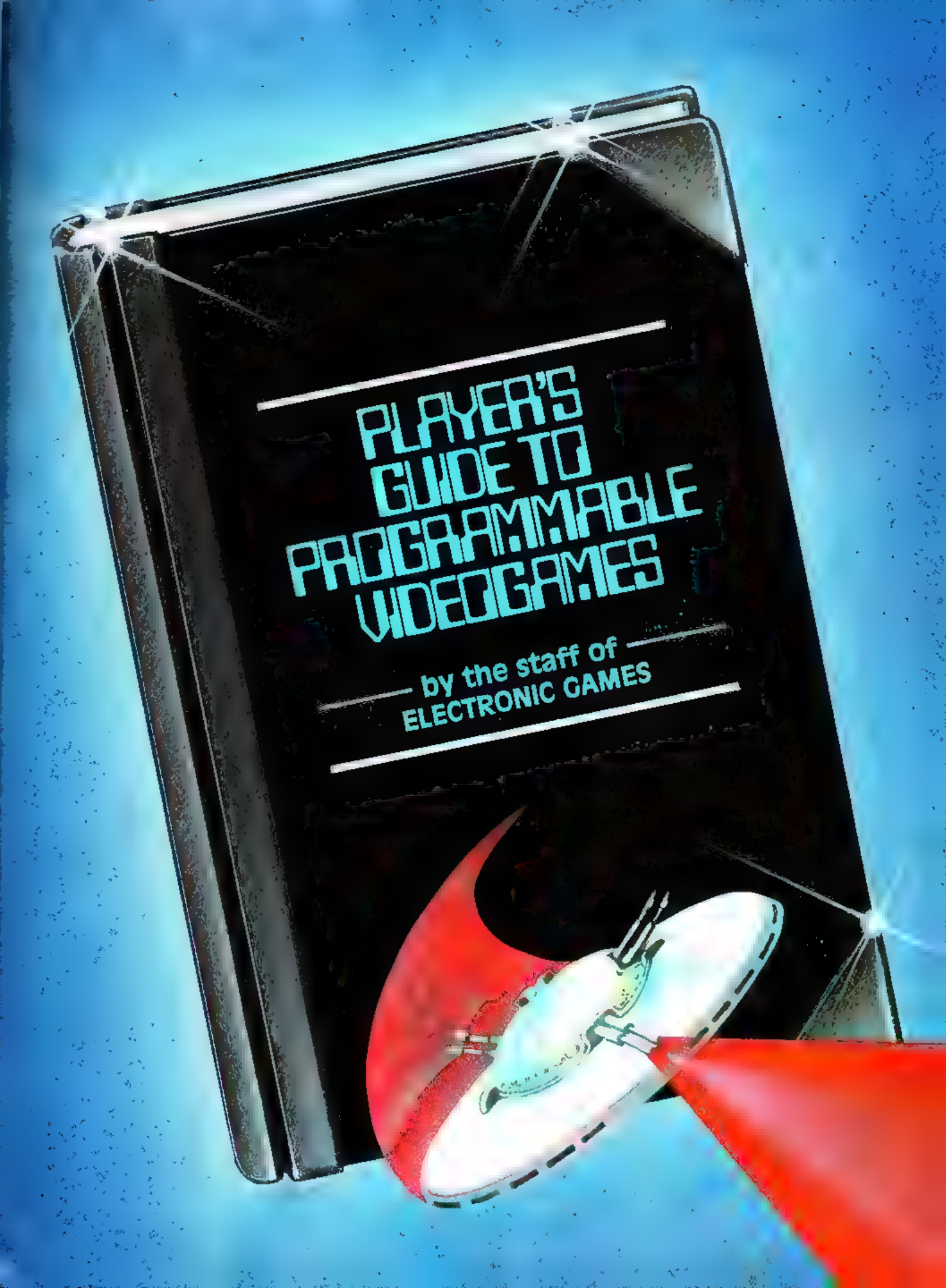

PLAYER'S GUIDE TO PROGRAMMABLE VIDEOGAMES
by the staff of ELECTRONIC GAMES

VIDEO The Entertainment

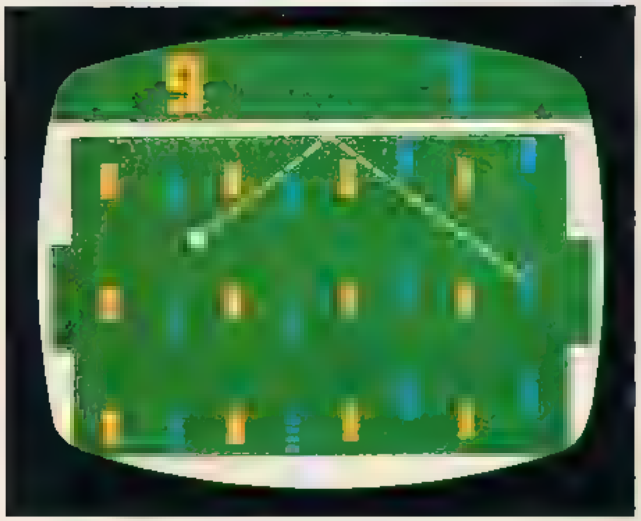
It Started With Pong

It started in a garage late in the 1960's. That's where Nolan Bushnell created the game that eventually took the world by storm—**Pong**. While many hands contributed to the creation of the electronic gaming hobby—both Atari and Odyssey made numerous breakthroughs in those early days—there is little question that Bushnell's vision of a hobby that the entire family could enjoy and share on an equal basis has become the guiding philosophy of electronic arcading.

Videogames, especially the programmable game machines that hook up to the family television set, have become part of the fabric of American life. These games are an entirely new form of recreation that virtually amounts to a home entertainment revolution.

No longer must we sit passively in front of the television set watching others have exciting adventures. With a paddle or joystick in hand, the arcader is ready, willing and able to defend the earth against aliens, race high-powered cars at the Indianapolis Speedway or throw an 80-yard touchdown in the waning seconds of the game!

ADVENTURE



VIDEO OLYMPICS

The Arcade Awards

Video Magazine established the Arcade Awards—"Arkies" for short—to recognize outstanding achievements in the field of electronic gaming. The first set of Arkies was announced in February 1980 and covered all hardware and software produced prior to January 1, 1980. The 1981 edition of the awards reflects accomplishments during the 12 months of the preceding year, a practice that will continue in the future.

Beginning with the 1982 Arcade Awards, **Electronic Games** magazine is assuming the role of co-sponsor. Following is a rundown on the winners in the various software categories for the 1980 and 1981 Arcade Awards.

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Best S.F. Game: Cosmic Conflict (Odyssey²) This tactical combat triumph puts would-be Han Solos into the cockpit of a space fighter. Keep firing those space torpedoes because there's no shortage of attacking ships!

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VIDEO GAMES

The Entertainment Revolution!

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Videogaming Today

Right about the time most arcaders are flipping through this first issue of **Electronic Games**, some retailer is selling the five millionth programmable arcade system. Since more than two-thirds of these machines have been bought only within the last year, it's safe to say that interest in home arcading is presently rocketing into the stratosphere.

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Perhaps the most exciting thing about programmable videogaming today is that there's no end to growth—or technological progress—in sight. More complex game programs utilizing increased memory, boardgame/videogame hybrids and exciting add-ons are all either hitting the stores now or will be there before the end of 1982. And it's almost impossible to believe some of the reports of games currently on the drawing boards of the major companies!

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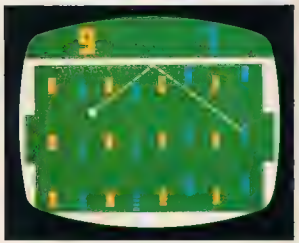

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Best Sports Game: NASL Soccer [Mattel] A scrolling playfield and the ability to pass to off-screen men give arcaders the chance to coach 10-man squads in what many believe is the crowning jewel of Mattel's sports game line.

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Note: Arcade Awards were also given for the best coin-op electronic games. **Space Invaders** won in 1980 and—yes! **Asteroids** took the prize in 1981. ★

COSMIC CONFLICT

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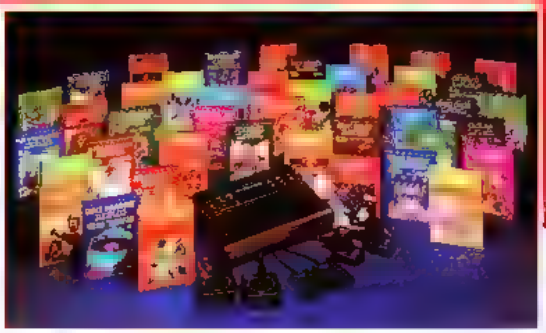


ATARI VCS

ATARI OFFERS LARGEST GAME LIBRARY

The VCS System

The Atari VCS didn't become the most popular programmable videogame machine in America by accident. What the console lacks in glittery spaceage styling, it more than makes up for with rugged construction and logical design.

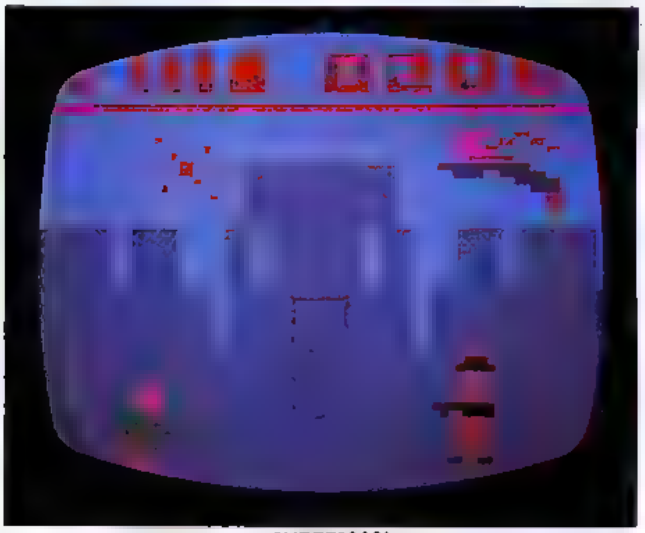
There's no question that the VCS is built to withstand the rigors of passionate play. The heavy-duty plastic case easily takes the bangs and bashes of younger arcaders—and some frustrated older ones, too.

All functions are controlled by two-position slide switches conveniently located on a front-facing panel on either side of the cartridge slot. The console's rear face provides connections for two joysticks or four paddles, and changing from one type of controller to another takes a matter of seconds. (Atari also offers a keypad for use with some games, and a special variation of its standard paddle that comes packed with the **Indy 500** cartridge.)

Atari captured the imagination of arcaders with the large number of cartridges it makes available for the system. Whether you like arcade-style dexterity games or video chess, there is sure to be an Atari cartridge—and in many cases several of them—that hits the spot. The company has always proven sympathetic to the needs of its players, so there is a good selection of solitaire games as well as head-to-head contests.

The Sunnyvale, Ca., giant also tries to provide a lot of flexibility within each cartridge. Some titles include well over 100 game variations! No one loves them all, of course, but the availability of so many options lets gamers customize most of the cartridges to fit their preferred style of play.

Owners of the VCS system also frequently benefit from Atari's involvement in the field of coin-operated electronic am-



SUPERMAN

MISSILE COMMAND

ATARI VCS AT A GLANCE

System Name	Mfrs' Name & Address	List Price	Type of Controller	Type of Keyboard	Sound Source	Number of Cartridges	Cartridge List Price	A.C. Adapter	RF Modulator
Atari VCS	Atari, Inc. Sunnyvale, Ca	$199.95	Joystick Paddle Keypad	None (Uses keypad for some games)	T.V.	43	$19.95-$29.95	Yes (Included)	Yes (Included)

usements. Often, titles that establish credentials in the commercial arcades will subsequently be made available in home versions. This process has brought such super games as **Space Invaders, Breakout, Missile Command** and **Asteroids** to the home screen.

Atari also leads when it comes to backing up its programmable videogame system with service. Replacement parts—the AC adaptor and RF modulator aren't quite as sturdy as the console—have always been widely available, and the company is now establishing a network of 500 repair stations to provide factory-authorized service from coast to coast.

Game Software

Space Invaders. This is clearly the best home version of the single most popular coin-operated attraction of all time. There wouldn't be videogames without **Pong**, but it's doubtful that home arcading could have become the rapidly growing hobby it is today without the impetus supplied by unparalleled success of **Space Invaders**.

Those outer space attackers never rest until they've marched down the playfield and pulverized the defender's three guns. The Atari cartridge lets expert **SI** players test their skill against challenging optional rules, like fast bombs and invisible aliens. Although **Space Invaders** makes an ideal solitaire game for one of those rainy Saturday afternoons, it can also be played by two arcaders alternating rounds.

Superman. As the Man of Steel, the gamer must capture Luthor and his four henchmen, cart them off to the Metropolis jail one-by-one and rebuild the city's bridge in the shortest possible time. The on-screen hero has super strength, the power of flight and super-vision to make the mission easier, but look out for the kryptonite bombs! They can rob Superman of his special powers which, in this game at least, only touching Lois Lane can restore.

This solitaire game requires a good memory, sharp planning and some hand-eye coordination to play successfully. Although **Superman** is a race against the clock, blinding reflexes aren't nearly as important as making the right move at the right time.

Breakout. The classic ball-and-paddle game has stood the test of time and become a certified classic. The Atari VCS version is equipped with enough variations to satisfy even the most jaded blaster of multi-colored brick walls.

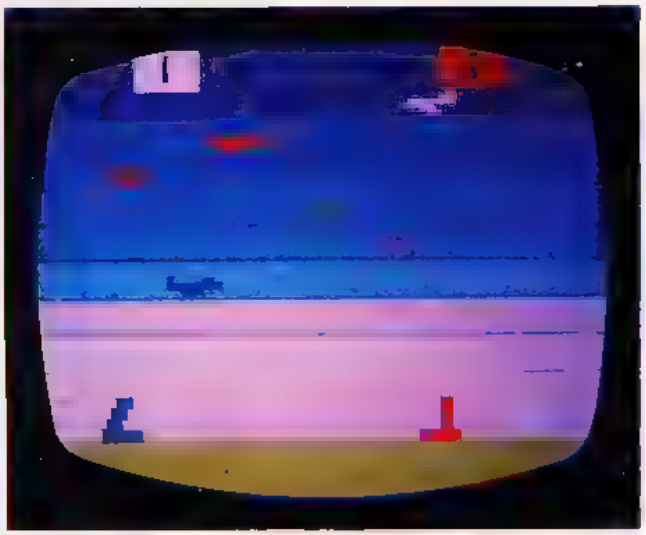
Those who haven't got the patience to nibble away at the barrier one brick at a time will want to investigate the **Breakthrough** variants included on the cartridge. In these games, the ball cuts a complete pathway right through the entire wall each time it ricochets off the paddle. The cartridge does, admittedly, lose some of its sizzle when you improve enough to wipe out two walls with the first ball, but that feat takes most players some time to accomplish.

Missile Command. Yet another commercial arcade classic has made a highly successful translation to the home screen. Instead of the usual wide range of carefully graduated skill levels, even baby brother or sister can easily adjust the difficulty to insure an enjoyable game. The only major element missing from the home version is the lightning-quick track-ball controller used on the coin-op machines.

Although the on-screen action may look somewhat helter-skelter to a novice, the better **Missile Command** players appear to do quite a bit of advance planning to dispatch the maximum number of in-coming rockets with the fewest possible defensive missiles.

Air-Sea Battle. It's easy to forget the classics in the rush to play all the great new games. In this case that would be a grievous mistake since this remains one of the finest cartridges in the Atari library. Best of a solid batch of games included in this title is **Torpedo**. Two players fire at passing ships, competing against each other and the clock in this fast-paced target shoot. It makes an especially good choice for a small toumament, since a three-game series can be completed in about 10 minutes, even allowing a little time between games for dawdling. Many players will also enjoy the **Shooting Gallery** variations and the anti-aircraft games also included in **Air-Sea Battle.** ★

BREAKOUT


AIR-SEA BATTLE

ACTIVISION

More Games For The Atari

The First Videogame Software Company

Hardware is certainly important, but most arcaders agree that software make the videogame world go 'round. That's why the arrival of ActiVision on the scene ranks as a major milestone in the annals of electronic gaming.

ActiVision is unique among videogame companies, because it's the only one that doesn't offer a complete system of its own. Jim Levy and the cadre of veteran designers who banded together to form ActiVision want to develop it as a reliable source of high-quality software.

So far, they've succeeded admirably. At the present time, the California-based supplier is concentrating on producing cartridges for use with the Atari VCS. Since its mid-1980 start, ActiVision has created approximately a dozen new games to delight VCS owners.

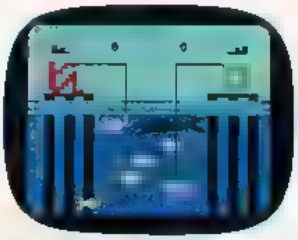
The company has already developed a style that's almost instantly recognizable by experienced arcaders. ActiVision seldom does the obvious game, for one thing, preferring to develop concepts never before tried in the videogame field. The result is a string of unorthodox — and excellent — cartridges including such novelty hits as **Fishing Derby** and **Freeway**.

TENNIS

Streamlined graphics spiced with cartoon-style animation also differentiate ActiVision products from games produced by other firms.

Game Software

Fishing Derby. This one knows no age barrier, because even those without super reflexes can have a whale of a good time. Its superb animation will appeal to kids weaned on Saturday morning cartoons, while the skill elements should please most adults. Fishermen sit on docks located at the left and right edges of the playfield and attempt to hook the finny targets that swim back and forth in the water below. And just when gamers think it's safe to go back in the water, the on-screen shark makes a meal of an angler's prospective catch.

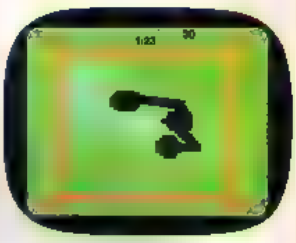


FISHING DERBY

Boxing. Calling all electronic Rocky Balboa's. The joysticks direct on-screen pugilists around a ring viewed from the overhead perspective. Arcaders decide when to show a punch — or try to block one — but the computer itself chooses the type of blow based on the fighters' relative ring positions. Each round lasts only two minutes.

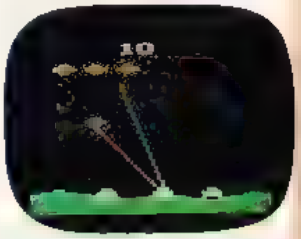
Freeway. Only those lacking a sense of humor could fail to love the idea of steering a chicken across the road as a videogame concept. It's more than just a good idea, though, **Freeway** is a solid one- or two-player game featuring the kind of non-stop action most arcaders love.

Tennis. This cartridge proves once again that a game doesn't have to be complicated to be enjoyable. In this joystick contest, the place where the ball hits the racquet determines the direction of the shot, with the angle depending on the level of difficulty in use. The outstanding graphics touch here is that the shadow of the ball is plainly visible on screen, traversing the grass court as the sphere is volleyed back and forth.



BOXING

Laser Blast. Tired of defending against the hard-charging hordes of **Space Invaders**? This is the game that lets arcaders move over to the offense against the creatures from space. Players control a flying saucer that makes attack runs against enemy ground-based gun positions. Turnabout on the aliens is fair play, indeed! ★



LASER BLAST

Custom Control With LE STICK

Gamers searching for the ultimate home arcade control device should check out Le Stick, available from DataSoft, Inc., for $39.95 each for the Atari VCS.

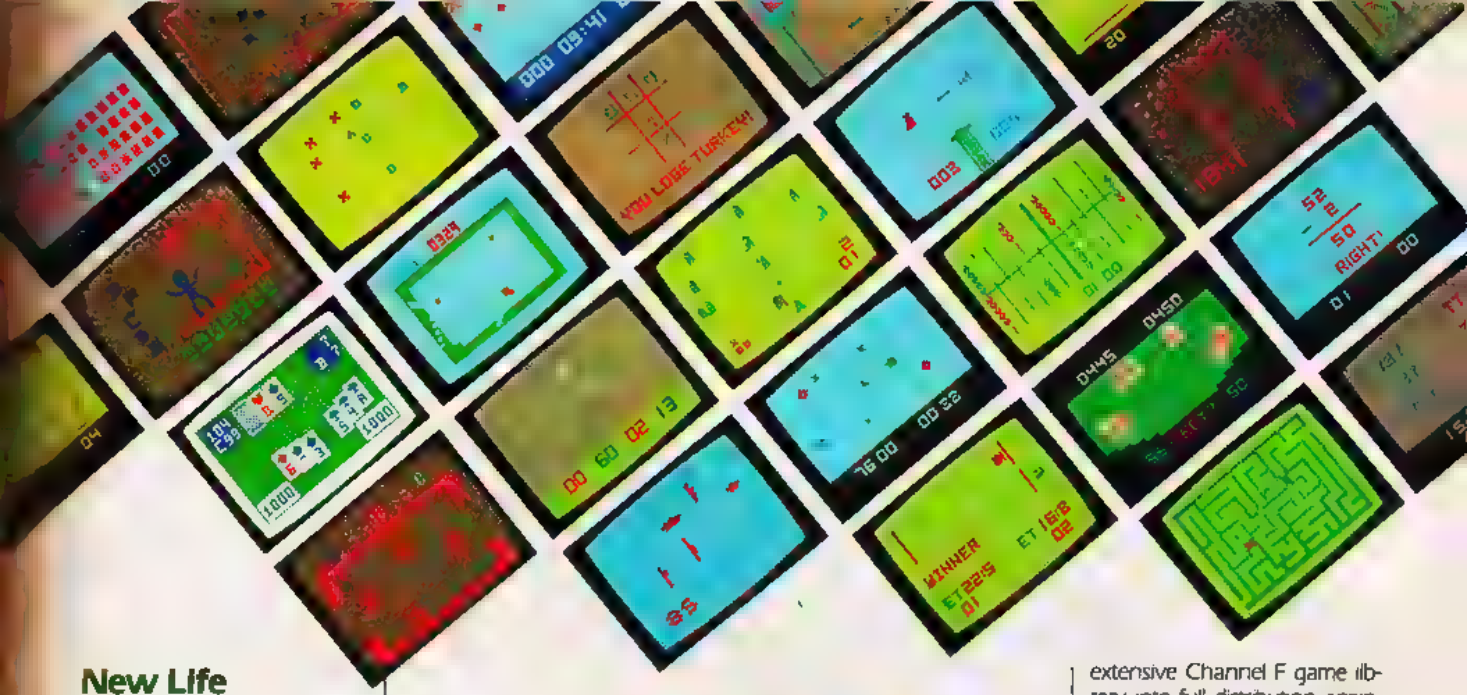
This is a true joystick, too, with attractive handgrip and a top-mounted action button. It's entirely free-standing, has no stationary base and provides instant response through the use of sophisticated mercury-filled incline switches.

Unfortunately, there are still a few bugs in the system. Of the pair tested by **Electronic Games**, the first worked perfectly in all directions but South, while the other performed perfectly.

There's also the potential problem of over sensitivity. Some gamers, trained on the typical Atari joystick, may find LeStick a bit too much to handle at first. Some will never get used to the different feel.

Some games are really improved by playing them with this special controller. The bi-plane variant on Atari's **Combat** cartridge was a revelation, and the cursor movement in **Missile Command** became as fast as an arcade track-ball.

Once DataSoft has ironed out the few remaining problems, Le Stick should fulfill its potential as a deluxe controller for the truly discriminating gamer.



New Life For Fairchild System

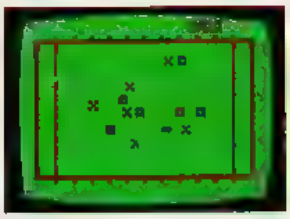
Zircon, Inc may be the most inappropriately named company in the entire videogame business. Certainly what the firm is doing for owners of the Channel F system previously manufactured by Fairchild Electronics is worth its weight in diamonds.

Beginning in time for the 1980 gift-giving season, Zircon took the Channel F out of mothballs and started trying to service owners on the customer list bequeathed to it by Fairchild. Not only is Zircon marketing the revised hardware developed just before the system was shelved by the original owner, but the company is willing to help existing owners upgrade by offering a special deal: the new unit costs only $69.95 with a trade-in Channel F.

The system itself has held up very nicely despite the passage of years and the advent of new technology. The controllers, which combine paddle and joystick in a single device, work well and allow designers great latitude with their game designs.

Zircon is rapidly getting the extensive Channel F game library into full distribution again, and hopes to have some exciting new products of its own to show the near future.

ZIRCON Revives Channel F



Game Software

Whizball. One thing's for sure, this one isn't exactly like anything else available to home arcaders. Whizball pits a pair of gamers against each other in a contest to see who can fire whizballs at a large floating block and nudge it through the opponent's goal.

Slot Machine. Very attractive full-color graphics highlight this electronic gambling cartridge. A picture of a large, one-armed bandit dominates the screen. The familiar three windows display the various pieces of fruit that mean so much to gamblers everywhere.

Football. The players are depicted on screen as little "x"es and "o"s, but play isn't bad at all. A total of 14 variations give coaches some scope for gridiron brainstorming. Graphically, **Football** most closely resembles an animated blackboard on which diagrammed plays magically unfold. ★

CHANNEL F AT A GLANCE

System Name	Mfrs' Name & Address	List Price	Type of Controller	Type of Keyboard	Sound Source	Number of Cartridges	Cartridge List Price	A.C Adapter	RF Modulator
Channel F	Zircon, Inc Campbell Ca.	$99.95 ($69.95 with a trade-in)	Joystick/ Paddle Combination	None	T.V.	24	$18.95 $29.95	Yes (Included)	Yes (Included)

ODYSSEY² Emphasizes

The Odyssey² System

It isn't always a blessing to be a pioneer. Odyssey has taken several years to bounce back from the kind of problems that all too frequently beset true innovators.

The company's original Odyssey game, marketed under the Magnavox imprint, introduced the idea of programmable videogames to the world and did much to spark enthusiasm for home arcades in this country.

Unfortunately for Magnavox, it created an appetite it could not really satisfy. Its designers based the device on the technology available in 1970, which resulted in a rather crude system by present day standards.

It didn't take long for competitors to realize that the folks over at Odyssey had discovered a billion-dollar concept. They were quick to enter the market with systems of their own. These entries profited mightily from Odyssey's experience and breakthroughs in computer science. The latecomers quickly captured the lion's share of the home arcade market, leaving Odyssey floundering in their wake.

But not for long.

Rather than charge into the fray blindly, the company worked long and hard to develop a machine equal or superior to anything available to home arcaders. They have succeeded.

The console has fewer game function switches than some other systems, primarily because it doesn't really need them. The keyboard provides all the buttons arcaders—and Odyssey's designers—will probably ever need.

Odyssey's controllers are permanently attached to the console unit. They're of the joystick type, which means that some games that might otherwise be handled with paddles are adapted to the stick instead.

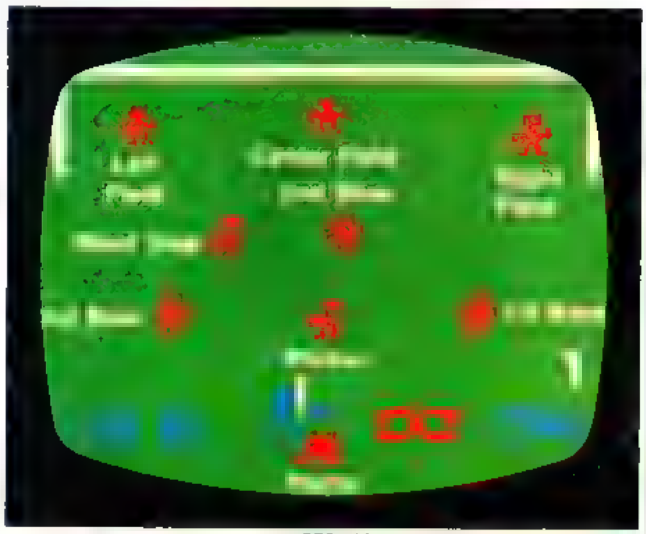
Odyssey² boasts the second largest game library in the home arcade field, and it's growing at a rapid rate. Odyssey has made a major effort to widen its game offerings and fill in some of the gaps in its line such as the former scarcity of solitaire contests. A glance at the latest catalogue indicates that their efforts have been crowned with success. Although sports and science fiction are the towering strengths of the Odyssey² cartridge line, there are now fine games in just about every category.

Game Software

UFO. As commander of an Earth Federation saucer, the arcader battles a seemingly endless supply of enemy UFO's. The Federation cruiser has a defensive shield and a powerful gun, but it is pathetically vulnerable whenever its systems shut down for recharging. Simple bad luck skrags even outer space aces from time to time, but accurate steering and pinpoint marksmanship earn the highest scores. The action never lets up, and it takes a topflight player to last more than a few minutes. Fans of on-screen explosions are sure to love the way things blow up in **UFO**, since there are at least three different types of conflagrations.

Baseball. Fans of hardball need look no further than this outstanding cartridge. This is an absolutely classic two-player sports simulation. It balances all the key elements of the National Pastime—hitting, pitching, fielding and running—to create a thoroughly enjoyable contest in which no single aspect of the sport is overly dominant. Some of the features include pitch selection, movable outfielders and stretching hits for extra bases. This home videogame is almost the equal of the best coin-op baseball machines, and it's way ahead of the run-of-the-mill ones. Best of all, those little electronic players will never interrupt your fun by calling a strike in the middle of a crucial series.

War of Nerves. Apart from the inevitable tank vs. tank shoot-outs, video wargames are few and far between. **War of Nerves** is a happy exception to the rule. This is one of the most entertaining electronic wargames available, packed with enough strategic possibilities to keep armchair generals happy through hundreds of on-screen battles. Each participant directs an army of robot soldiers, which move semi-independently across a playfield enlivened by various terrain features. The fortunes of war generally seesaw from one side to the other several times during the course of each military engagement, building excitement to sky-high levels. Since this cartridge's brand of action is radically different from most other videogames, it makes a refreshing change-of-pace.



BASEBALL

ODYSSEY² Emphasizes Sports and Science Fiction

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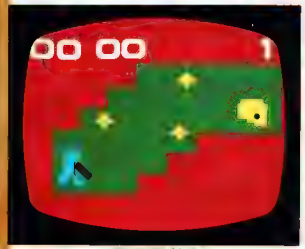
Computer Golf. Dual play fields distinguish this sports simulation, which pits would-be Jack Nicklauses against a pleasingly varied nine-hole course. Swingers tee off on a field depicting an overview of the entire hole that spots the locations of the fairway and surrounding hazards. When the golfer finally gets the ball onto the green, the screen shifts to a representation of the area surrounding the pin for the putting phase of the game. Gamers line up their shots using the joystick to choose the direction of the ball's path and pressing the action button to regulate the force behind each stroke. **Computer Golf** created quite a stir of admiration when it first appeared, and it remains an outstanding cartridge today.

Quest for the Rings. This is by far the newest of the five games. **EG** has selected as the foundation of an Odyssey² game library—and it may just be the best of the entire bunch. In this boardgame/videogame hybrid, players team up to search for 10 magic rings which the leader of the forces of evil has hidden in labyrinths deep beneath the earth. Gamers may choose any combinations of four different types of characters, each possessing a unique special ability. Monsters also come in several menacing flavors, ranging from lowly orcs to fire-breathing dragons. Like the non-electronic role-playing games, players must cooperate to achieve a victory rather than competing against each other as in most other games. ★

ODYSSEY² AT A GLANCE

System Name	Mfrs. Name & Address	List Price	Type of Controller	Type of Keyboard	Sound Source	Number of Cartridges	Cartridge List Price	A.C. Adapter	RF Modulator
Odyssey²	North American Philips, Knoxville Tenn.	$199.95	Joystick	Diaphragm	TV	25	$19.95-$59.95	Yes (Included)	Yes (Included)



COMPUTER GOLF

WAR OF NERVES

QUEST FOR THE RINGS

UFO

Sports and Science Fiction

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Odyssey²	North American Phillips, Knoxville Tenn	$199.95	Joystick	Diaphragm	TV	25	$19.95-$59.95	Yes (Included)	Yes (Included)

COMPUTER GOLF

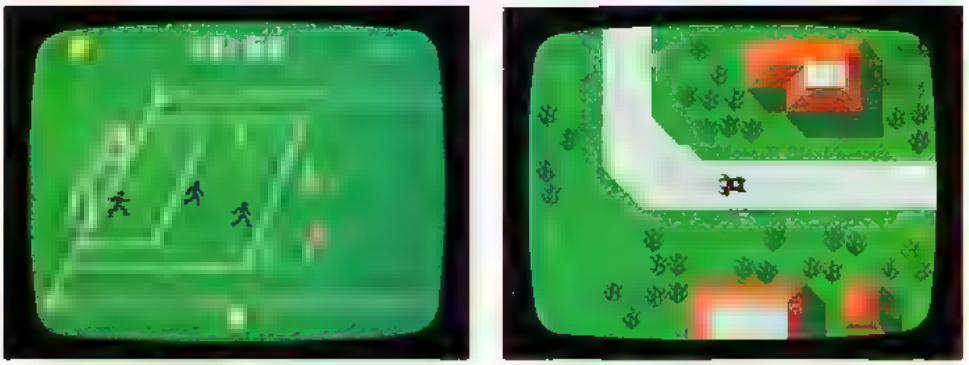
WAR OF NERVES

QUEST FOR THE RINGS

UFO

MATTEL

FEATURES MODULAR DESIGN



NASL SOCCER

AUTO RACING

The Intellivision System

"Modular" is the buzzword at Mattel, which hopes to position its Intellivision about halfway between pure videogame systems and personal computers. The idea is to start with the currently available Master Component and then, as times goes by, add the keyboard and other peripherals to create a true microcomputer.

Unfortunately the often-promised keyboard is still not available in the stores. Mattel, after failing to come through on several announced delivery dates, is now playing its corporate cards close to the vest. The best guess is that Intellivision owners will finally get a crack at this important add-on some time during 1982.

Meanwhile, though, the Master Component is a terrific home arcade. The sleekly designed Master Component, ultimately intended to fit inside the keyboard, is one of the best-looking electronic devices on the market today.

The real prize is the superb Mattel controller. There are two attached to the game, and the console has recesses into which they slip easily when not in use.

Each controller has a keypad, direction disk for movement and a set of four side-mounted buttons. Each Intellivision cartridge comes with a set of two colorful overlays that slip into the controllers, customizing them to facilitate play of the game in question. Mattel designers have been quick to take advantage of this superior control system by designing games which allow an unusually large amount of player input.

Intellivision probably has the best graphics of any programmable videogame system. In fact, few computers priced under $5,000 can match the color and detail of the typical Intellivision playfield.

Game Software

NASL Soccer. By having the screen scroll up and down the field to follow the action, Mattel's designers really opened up the game tremendously. Although only three booters from each team are on screen at any one time, this feature allows coaches to run set plays, pass the ball the length of the field and set up lightning-like scoring drives. The three-quarters view of the field—as opposed to the more common overhead perspective—makes the game both visually more realistic and a lot more fun to play.

NHL Hockey. No half-measures here. Not only are there penalties for rules infractions, but violators have a realistically high chance of getting away with on-the-ice mayhem when the referee's back is turned. Action is fast on this trapezoidal rink, with skaters gathering speed when they rush down the ice in a straight line. The computer controls the goalies, and it does an excellent job. The netminders will stop almost any simple shot except for a point-blank slapper. Just as in real hockey, the idea is to make the goalie hit the ice to make a save and then fire home a rebound while the man in the mask is out of position.

Space Battle. Mere tactical skill

loses every time in this one unless it's backed up by sound long range strategy. In this solitaire contest, players deploy a trio of three-ship squadrons against five mighty fleets of invaders. Whenever the warring factions meet in deep space, the action moves to ship vs. ship combat. Graphics, especially in the combat phase, are quite noteworthy. The marauding alien craft have a realistic look seldom seen in videogame animation.

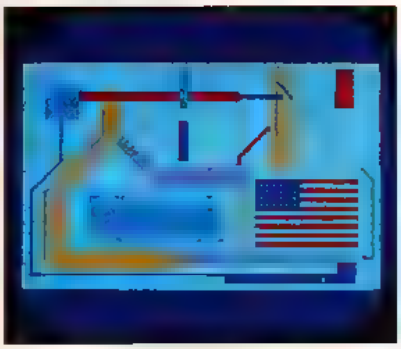
NBA Basketball. This wonderfully authentic recreation of the hoop sport has everything from cheering crowds on the sideline to passing and shot-blocking. The computer handles all players not directly under the gamer's control, and sometimes it pulls off some terrific plays in clutch situations.

Auto Racing. Mattel is certainly not the first company to produce a motor sports game, but **Auto Racing** clearly laps all the competition. The cartrige offers drivers a wide choice of cars and tracks, making it fairly easy to handicap the better racers and make it an even contest. Highly detailed graphics put **Auto Racing** in another class compared to the usual "round-and-round-the-oval" contests. ★

INTELLIVISION AT A GLANCE

System Name	Mfrs' Name & Address	List Price	Type of Controller	Type of Keyboard	Sound Source	Number of Cartridges	Cartridge List Price	A.C. Adapter	RF Modulator
Intellivision	Mattel Electronics, Hawthorne Ca.	$299.95	Keypad/ Disk Hybrid	Full-stroke (Not yet available)	TV	13	$29.95	Yes (Built into Master Component)	Yes (included)

PROFESSIONAL ARCADE UPGRADES TO A COMPUTER



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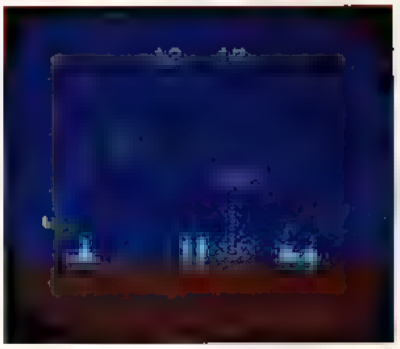


SEAWOLF/MISSILE

Astrovision Plans Revival

Astrovision has gladdened the hearts of the many fans of the Professional Arcade with the announcement that it intends to revive and develop the system pioneered by Bally. It hopes to succeed where the original manufacturer failed, and many see considerable cause for optimism.

For one thing, the Professional Arcade is still one of the most advanced and powerful programmable videogames ever produced. In fact, the concept of a modular hardware system that could be upgraded to a complete home computer may simply have been ahead of its time.

Astrovision is keeping quiet about its plans at this time, so it's difficult to know whether the new ownership will put the entire Bally game catalog back into distribution or just selected titles. Likewise, Astrovision has revealed no information concerning the development of new games for the system. One thing the company has already promised is a ZGRASS keyboard with 24K of memory, but even in this case no firm delivery date is specified.

The Professional Arcade System

The Professional Arcade is a modular system that attempts to bridge the gap between videogames and home computers. At its heart is a compact console that features a keypad, a pair of Bally's unique controllers and a covered rack for storing game cartridges and cassettes. The keypad is used with the built-in calculator and can also reset screen colors. Perhaps future games will make use of the pad as an input device.

Surprisingly, the Professional Arcade comes pre-programmed to play three games, **Gunfight, Checkmate** and **Scribing**. Even more surprisingly, they're all very much worth playing.

Another big plus, the Professional Arcade is the only programmable videogame that allows players to attach up to four joystick-style controllers at the same time. (Actually, Bally designers combined the functions of a joystick and a paddle in a single device.)

Game Software

Gunfight. This two-player game is as good as anything you'll find in a coin-op parlor. Players move on-screen buckeroos using the joystick, aim with the paddle and fire by pressing the trigger. Each gunslinger gets six shots, after which a reload cycle begins.

Checkmate. Up to four players simultaneously steer their symbols across the screen, creating serpentine lines. The object is to be the last one to crash into a line or one of the playfield boundaries.

Scribing. Not really a game, but most arcaders will probably have at least some interest in what may well be the best drawing program available for a programmable videogame. Using the keypad and the controller, it is possible to alter the color, brightness and hue—and create some electrifying visual effects.

Seawolf/Missile. This cartridge contains two highly playable games. **Seawolf**, a visual stunner, casts two players as submarine commanders, while **Missile** has arcaders trying to bring down airborne targets with horizontally mobile guns.★

WHICH SYSTEM'S FOR YOU?

"Which videogame is best?" That must be the most frequently asked question in the hobby of electronic gaming. Unfortunately, it's a riddle that truly has no definitive answer.

The plain fact is that no single programmable videogame is for everyone. The home arcade field is blessed with several excellent systems, certainly all those mentioned in the **Players Guide** can provide years of gaming pleasure.

A better question to ask is "Which is the best system for me?" That one is no cinch to answer either, but at least it points prospective buyers in the right direction.

Which system is best depends entirely on what the gamer wants from the machine. Sports nuts will naturally desire a videogame that puts a heavy emphasis on athletic simulations. On the other hand, those who spend a lot of time with coin-op arcade-style games would be better advised to seek out a system that offers lots of cartridges of this type.

Another important consideration is how the system will be used once you get it home from the store and uncrate it. If the arcader spends a lot of time enjoying his hobby solo, then it makes sense to buy one of the devices that provides lots of opportunity for solitaire play. Of course, if there's always a roomful of people waiting for a turn at the joystick, then head-to-head games take on increased importance.

The table below summarizes the feelings of the staff of **Electronic Games**. It should **not** be automatically taken as gospel. Rather it is a collection of opinions solicited from experienced gamers that is intended to merely serve as a guide.

One thing is for sure. Whichever game you finally choose will do its job of keeping you entertained long and well. ★

Videogame System Scoreboard Chart

	Atari VCS	Odyssey²	Intellivision	ActiVision	Channel F
Head-to-Head Games	Excellent	Excellent	Excellent	Good	Fair-Good
Solitaire Games	Excellent	Good	Fair	Good	Good
Variety of Software	Excellent	Excellent	Fair-Good	Good	Good
Arcade Games	Excellent	Good	Fair	Fair	Fair-Good
S.F. & Fantasy Games	Excellent	Excellent	Fair-Good	Fair-Good	Fair
Sports Games	Fair-Good	Good-Excellent	Excellent	Good	Fair
Strategy Games	Fair	Excellent	Excellent	Fair-Good	Fair-Good
Electronic Board Games	Fair-Good	Excellent	Good-Excellent	Fair-Good	Good
Graphics	Good	Good	Excellent	Excellent	Fair-Good

Note: These ratings are based on an evaluation by the staff of **Electronic Games.** They consider both the quantity and quality of the offerings within each category. Thus a "Fair" rating may indicate that there isn't much choice, but what is available is good to excellent. The best evaluation is the one each arcader makes for him or herself.

PROGRAMMABLE PARADE

by Bill Kunkel and Frank Laney Jr.

☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆

The worst thing about **Quest for the Rings** is its gilt-edged price, which is considerably higher than for any other videogame cartridge on the market. The best thing about this fantasy adventure for one-to-three players is that it is worth every single dollar of the asking price.

Quest for the Rings shines forth as a landmark in the history of electronic arcading. It's almost as much of an advance over existing videogames as they are an improvement over original **Pong.** For the first time, designers have blended elements of the board game and videogame. And since humans perform some of the tasks—like moving the heroes around the colorful map that comes with the cartridge—that the Odyssey² console would otherwise have to handle, **Quest for the Rings** is a giant step ahead of other videogames in richness and complexity.

To win, a pair of heroes must find and capture 10 magic rings, which the dreaded Ringmaster has hidden beneath some of the 23 castles scattered across the landscape. The champions of good must also

Fight Evil with Quest for the Rings!

fight—or at least out-maneuver—the various creatures the Ringmaster has delegated to guard the mystic treasures.

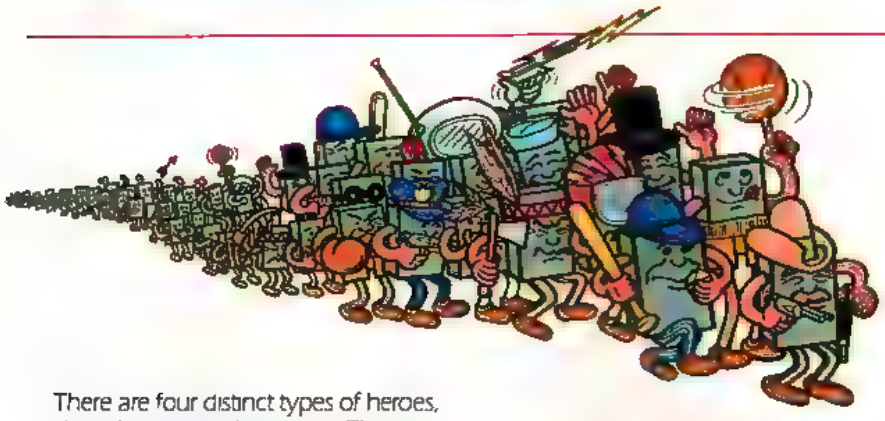
This sketchy description barely hints at the thrills awaiting Odyssey² owners who decide to go adventuring in this dark realm of magic and mayhem. **Quest for the Rings** offers so many strategic and tactical choices and involves so many variables that even finicky arcaders will happily play and play again.

This game gives new meaning to the word "programmable." Before the action even starts, one player assumes the role of Ringmaster and hides the precious baubles.

The set-up procedure is fairly simple. Each ring is symbolized by one of the small round wooden tokens which fit neatly under the larger ones that represent the castles. At the same time, the Ringmaster positions the tokens for the heavy-duty monsters generally under the castles where the rings are buried. The castle counters are two-sided, with the reverse indicating which type of labyrinth lies beneath the stout stone battlements.

MISSILE COMMAND

KABOOM



There are four distinct types of heroes, each with special advantages. The warrior wields a magic sword, the wizard casts spells, the phantom slips wraithlike through walls of solid rock, and the chameleon uses a mystic cloak to become invisible and undetectible to the monsters.

The human players may each choose any of the four heroes. All combinations are possible, but gamers must take care to select champions that can work together as an efficient team. In **Quest,** players must cooperate to achieve the common goal of collecting the 10 rings. (The third player continues to function as the Ringmaster throughout the game, occasionally using mental powers to "possess" one of the do-gooders and cause the teammates to battle each other. If there are only two arcaders available for a session of **Quest**, the Ringmaster abandons that role after setting up the game and becomes a hero. Naturally, the other hero has full charge of directing the team around the map.)

The legions of evil include quite an awesome assortment of nasties. Orcs and firewraiths are found in every dungeon visited. The former are diminutive, but no-less-cruel ogres, while the latter are the enslaved souls of past victims that can kill the living with a mere touch. The Ringmaster's magic also makes both types of monsters closely resemble the appearance of the heroes, though the creatures have characteristically shambling walks. The warrior can easily dispatch such foes with the enchanted blade, and the wizard's spell will keep them at bay, too.

The so-called "nightmare monsters" are an entirely different matter. The spydroth tyrantulus is a spidery behemoth of utter evil. It loves to eat living flesh, which it believes will extend its own lifespan. The spydroth moves somewhat slowly from side to side, but it will pounce on an unwary adventurer from above in a split second. Sword and spell cause it to back off temporarily, but the spydroth cannot be permanently killed.

Doom-winged bloodthirsts are bestial vampires who impale victims on their enormous fangs and drink their blood. They back off, flutter and fall when hit by the sword or a spell, but they soon return to the attack unharmed.

What would a fantasy adventure be without fire-breathing dragons? **Quest** has three of them—Scortha, Goldfang and Mythrog—who will give the heroes a rough time, indeed. Waving the magic sword will make a dragon turn away and the wizard can stop the flame breath with a spell, but nothing deters these super monsters for long. Running and hiding is often the best strategy when a dragon stands between the heroes and their prize.

The actual battles take place within underground dungeons constructed by the Ringmaster and equally malevolent allies. There are four types, though each individual labyrinth is randomly generated by the Odyssey² and is totally unique.

Dungeons were built by men but subsequently captured by the Ringmaster. The Crystal Caverns have invisible walls built by the Wind Wielders at the Ringmaster's command. These places are quite dangerous, because the monsters automatically sense the movement of the unseeable barriers. The walls in the Shifting Halls move every few seconds, frustrating the heroes' attempts to get their hands on the ring. The Infernal Infernoes are towers of lava kept molten by the Ringmaster's sorcery. The infernoes are particularly tough on the phantom, since these elusive heroes will be incinerated if they try to pass through the red-hot walls.

Befitting its overall excellence, **Quest for the Rings** is also distinguished by magnificent animation. During the first few games, more than one arcader will be tempted to surrender to the monsters just to watch them cavort across the screen.

Quest for the Rings is, quite simply, the most innovatively designed video-

AUTO RACING

UFO

game of all time. Now that Odyssey² designers have started to tap the potential of the system's keyboard, electronic arcaders can only drool with anticipation over the prospect of an entire series of such marvelous cartridges.

Missile Command (Atari/CX 2638) represents the most successful conversion of a commercial arcade supergame to the more limited confines of a home programmable system. Devotees of the coin-op classic may miss the blurring speed of that version's track-ball controller, or the incoming fragmentation missiles, but virtually every other element of this Atari masterpiece has made the journey to the VCS format.

Gamers still launch anti-missile missiles from the command center, positioned in the middle of the six cities under its protection at the base of the playfield. Suddenly, the night sky is streaked with incoming fire, caused by luminous waves of attacking missiles. An alien assault has begun and grows faster and deadlier with each successive wave. Armed with three ten-load rounds of ammunition, the human commander uses the joystick controller to target and launch his missiles in an attempt to establish a protective umbrella of defensive fire. Cities are destroyed when hit by enemy missiles, and at least one must still be standing in order to keep the game alive. Scoring 10,000 points causes one previously-annihilated city to rise from its ashes.

Strategically, the cities to the immediate left and right of the command center are the most vital. Since players must also defend the center, maintaining these two cities becomes absolutely vital. When targeting, the trick is to aim not where the incoming missile is, but where it will be when the anti-missile missile detonates. Arcaders must aim so that the defensive missile will explode along the same trajectory its target is following, only slightly ahead of it. Once a missile detonates, its explosive force mushrooms outward, incinerating any incoming projectiles luckless enough to make contact.

Missile Command is a realistic space war game—with a scenario designed to heighten the effect. Unlike say, **Space Invaders**, in which the alien invasion is highly symbolic, it takes little imagination to picture yourself actually within the imperilled command center frantically launching missiles and grimly awaiting the next assault.

Atari has graced this exciting cartridge with truly striking cover art and some real innovation in terms of play variation and packaging. Rather than offering hundreds of play options, **Missile Command** game numbers change only the skill level at which play begins. Game 1 starts off with the very slow first wave, which has little point value. Subsequent games get going with the second, third—or even thirteenth—wave, where the action is much faster and the missiles are worth much more.

Game No. 17, however, is something special. It's a super simple version for beginners that should be perfect for younger arcaders, or adults who can't stand making fools of themselves in front of the kids. The instruction booklet not only explains the game, but even offers play tips and strategy.

Altogether, it's a great package—with an even greater game inside.

Kaboom (Activision/AG-010) shows off the approach to game design that has vaulted Activision into the videogame big time almost overnight. In **Kaboom**, appropriate sound effects are combined with streamlined graphics and fluid animation on a par with the Saturday morning cartoon shows. Even a novice can learn this one in about four seconds, and pre-schoolers and grizzled videogame veterans will be equally delighted by it.

A masked malefactor, who lugs around an inexhaustible supply of ammunition, races back and forth across the top of the playfield, lighting fuses and tossing bombs. The on-screen character drops the explosives in waves. He throws more bombs in each succeeding wave, and his speed keeps increasing until he's lobbing a fusillade of 13 bombs per second. Thankfully, **Kaboom** provides an automatic pause so that players can catch their breath between rounds.

The player uses a paddle to move a stack of three water buckets, which are piled one above the next in a vertical column, horizontally along the bottom of the field. The idea is to prevent any bombs from hitting outside one of the buckets. If one gets through, it detonates every other explosive device in view in a wild chain reaction.

The game takes away a bucket after each miss, but scoring 1,000 points re-

stores a lost tub if the arcader has fewer than three currently in play

As a result of this rules quirk, **Kaboom** designer Larry Kaplan suggests sacrificing a tub just before reaching the 1,000-point milestone. After the explosion, the game resumes at a speed one notch slower, giving the player a bit of a breather. And once the score passes 1,000, the machine restores the lost bucket, anyway.

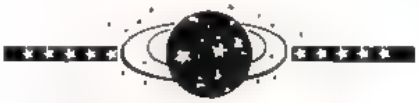
Kaplan has jokingly described his creation as "mindless." It isn't, but it is also not a game in which precisely lining up each catch can be a viable strategy.

Kaboom is impressionistic. When the speed escalates to 13 bombs per second, going with the flow must be the order of the day. Sweep back and forth across the screen, and try to get a sense of the pattern. Let your natural arcader's instincts take control of movements.

Kaboom is infinitely more enjoyable than the commercial arcade game upon which it is loosely based, **Avalanche.** Kaplan's delightful electronic artwork is the main reason. Fuses sizzle, bombs detonate in a beautiful display of video pyrotechnics, the water in the buckets splashes when an explosive lands, and the bomber's habitual frown turns into a smile whenever he slips an incendiary device past the defender.

Scoring in **Kaboom** follows the new trend toward lower totals. Those who customarily make the **Space Invaders** scoreboard roll over a dozen times a game will be hard pressed to top 3,000 in this change-of-pace cartridge for the Atari VCS. Setting the difficulty switch to "A" gives those who've mastered the game a fresh challenge by halving the size of the buckets.

The electronic arcade world will probably never witness a national **Kaboom** tournament, but the cartridge does provide a refreshing change from skill- and strategy-intensive games. When you're tired of blasting asteroids or invading aliens, it's really quite a treat to enter the **Kaboom** universe for a little game of catch.



Auto Racing (Intellivision/1113) will pleasantly surprise arcaders who don't usually like race games. And those who generally do like electronic motor sports cartridges will undoubtedly greet this new entry like manna from heaven.

Graphics set **Auto Racing** head and shoulders above every other cartridge in a similar vein. The playfield displays an overhead view of whichever of the five available tracks is in use. Instead of cramming a whole course into the screen, however, Mattel designers wisely decided to have the screen scroll so as to show only a small segment of the track at any one time.

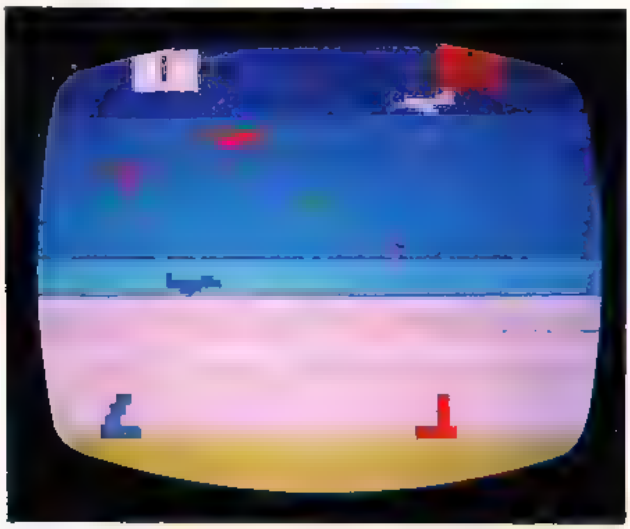
The racers are rendered in realistic detail, which does much to enhance the visual impact of the game. This, combined with the limited view of the road, produces a more intensively involving racing experience.

Audio trimmings aren't neglected, either. Gamers drive their cars to the accompaniment of the roar of the engine and the squeal of the brakes.

There are five different colored autos that offer a choice of four combinations of top speed, acceleration and cornering ability. The tan and blue cars are exactly alike, so that drivers of equal skill can race identical cars head to head.

Although two can play at the same time **Auto Racing** is even more fun as a solo competition against the clock. In the two-player version, the computer must stop the action whenever one car gets a sizable lead over the other, or the two autos could not be shown on the screen simultaneously. The driver of the racer in front gets one point, and the Intellivision automatically re-starts both vehicles at the last previous checkpoint passed. This breaks up the flow of the action somewhat. Zipping through five laps in the solitaire version may prove more satisfying to many arcaders.

TENNIS



AIR-SEA BATTLE

Auto Racing is not one of those games in which the driver merely winds up to top speed and takes the entire course flat out. Braking, accomplished by pushing a button on the side of the hand controller, is absolutely necessary. The trick is to slow down as little as possible in the turns without spinning off the track. Running off the road into the grassy ruts on either side will greatly slow down a racer, and hitting any of the trackside obstacles results in a thunderous crash.

Because of the wide choice of cars and courses, **Auto Racing** will challenge players of all levels of ability. It's easy to handicap the more proficient drivers by giving them the weaker cars, while a poorer player will get a real lift from using one of the racers with good cornering ability.

The insidious thing about **UFO** (Odyssey²/9430) is that a new round starts within seconds after the previous one ends. Your Federation star cruiser has no sooner fallen prey to a marauding UFO than a new Federation saucer pops onto the screen.

When a game is as delightfully addictive as **UFO**, such an auto-start feature may pose a health hazard to more compulsive arcaders.

As commander of an Earth Federation star cruiser patrolling a perilous sector of deep space, the gamer must battle three distinct types of UFO's. Random ones drift aimlessly through space, hunter-killers home in on the Federation ship and enemy light-speed starships fire computer-guided missiles.

Which isn't to say that the star cruiser is helpless. The Federation ship is surrounded by a force field—indicated by a ring of little blue dots encircling the saucer—that disintegrates all forms of UFO's on contact.

The saucer also has a powerful offensive weapon in the form of a laser cannon. When the commander presses the action button, the laser fires in the direction indicated by the blue dot in the force field ring. Aiming can be a little tricky at first. The dot rotates clockwise around the ship during movement, stopping only when the cannon is pointed exactly in the direction of flight.

The shield itself makes a pretty potent weapon as well. Any UFO explodes on contact with the shield, making ramming a useful and effective tactic.

There is a catch, however. Whenever the star cruiser employs its force field or hits a UFO with the cannon, the system shuts down for recharging.

UFO is a fine example of how programmable videogame cartridges can borrow extra touches from coin-op electronic games. **UFO** features, for the first time in any one videogame, an on-screen read-out of the high game in the play session underway. There's even a spot to put the top scorer's name, easily typed in on the Odyssey² keyboard.

If you like explosions, you'll love **UFO**. There are at least three different ones, plus an occasional strange hybrid the machine concocts to take care of extraordinary occurrences (like two hunter killers, a light speed star ship and the Federation saucer colliding at the same time).

Another fine use of graphics involves the homing UFO's. The majority of hunter-killers are created right on the playfield as a result of collisions between two random UFO's or the interaction of a random UFO and one of the missiles fired by the light-speed star ship.

Since random UFO's are worth only one point, hunter-killers count for three and the light-speed "banana boats" are worth 10, a lot of the strategy concerns chasing the more valuable targets while dodging the rest to avoid unnecessary recharging periods. The 10-pointers are particularly important.

The light-speed starships are lethal when approached from above or below, but they do have an achilles heel. The invaders can't fire horizontally, so the Federation ship is safe if it rushes at the light-speed craft from due East or West relative to its position on the playfield. The 10-point UFO's pose the greatest danger to the Federation saucer, but players who merely dodge them will find it mighty hard to mount up many points.

UFO is one of the best games in the entire Odyssey² library and seems destined to become something of a videogame classic. This is a "must buy" for every Odysssey² owner.

Mention a videogame version of **Tennis** (Activision/AG 007) and most gamers will think of a **Pong**-like program—two paddles, a square ball, and the traditional line down the center of the screen. That's what makes Alan Miller's game design for Activision's version of video-Wimbledon a leading candidate for "game most likely to blow your mind."

Miller, who brought the trapezoidal "3-D" court to programmable videogames, elaborates upon his initial masterstroke with an even more intriguing idea: a shadow moves along the ground as the ball flies through the air.

The computer takes shots automatically, determined solely by the part of the racquet that strikes the ball. Hit the ball with the racquet's left side, right edge or center and it goes that way. The action button is used solely to serve, making Tennis a game of pure positioning. Each joystick controller moves one of the two realistically-rendered, on-screen players, and the playfield's three-dimensional effect permits total freedom of movement on the court.

One of the best designed, realistically styled videogames, **Tennis** unfortunately has been overshadowed by the game with which it was co-released, Laser Blast. In case you missed it, it is well worth a look. Highly recommended.

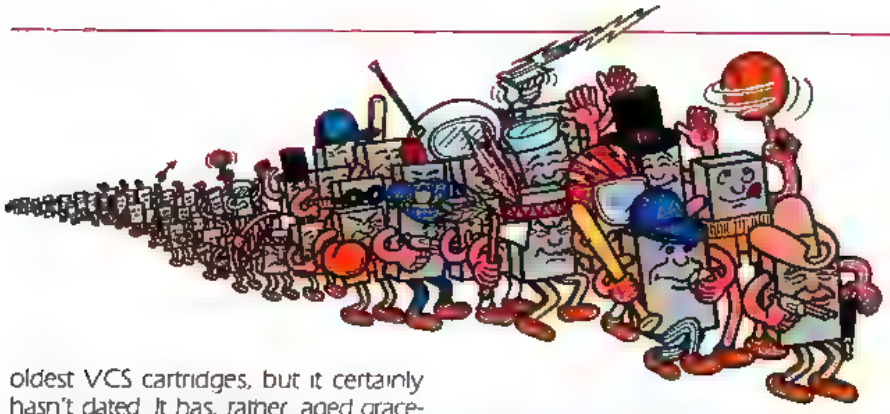
Air-Sea Battle (Atari/CX-2602), one of the earliest cartridges offered for the VCS, became an instant classic when it was released and is still a remarkably fine videogame today. Its introduction heralded the dawn of the age of true programmability, because it was the first title that departed from the ball-and-paddle contests that ruled the roost back in 1978.

Air-Sea Battle's numerous play variations allow gamers to fire anti-aircraft guns, launch torpedoes, pilot jets and steer battleships—all within a basic "shooting gallery" format. The program employs a horizontally striped playfield executed in pleasing shades of blue across which move targets like so many ducks in a row.

Number 11 is probably the best of the variations. Two submarine captains compete against each other and the clock to see who can wreak the most havoc in the shipping lanes by peppering passing ships with guided torpedoes.

It's the ability to steer the missiles that make this such an enjoyable contest. Shots must be considered as part of a series and orchestrated as a smooth-flowing, continuous barrage. Blowing a ship out of the water is worth little in and of itself, unless the commander is left in good position to shoot at the next target.

Air-Sea Battle may be one of the



oldest VCS cartridges, but it certainly hasn't dated. It has, rather, aged gracefully and is still one of Atari's outstanding software selections.

Breakout (Atari/CX 2622) has proven popular in every possible electronic game format from mini hand-helds to coin-op arcade machines.

Breakout is probably the most successful game developed from the ball-and-paddle formula introduced by **Pong**. In the basic game, players manipulate a horizontally movable paddle across the bottom of the playfield in an attempt to hit the ball against the seven rows of colored bricks near the top of the screen.

The ball removes a brick each time it smashes into one and then bounces back toward the paddle. Simple enough mechanics, to be sure, but not necessarily an easy feat to accomplish over and over again. Five balls constitute a complete game.

The prime strategy is to concentrate fire by causing the ball to ricochet off the appropriate segment of the paddle to produce the desired angle of flight. Keep blasting away at one section of wall, preferably at the extreme left or right of the playfield, until the ball has cleared a path to the empty space behind the wall. The ball will bounce around back there instead of returning to the lower portion of the field, scoring points in bunches instead of one at a time.

The same cartridge contains **Breakthru**, a souped-up version of the classic game. This time, the ball clears a path through the entire wall, bounces off the rear of the playfield and once again plows through the bricks on the return trip.

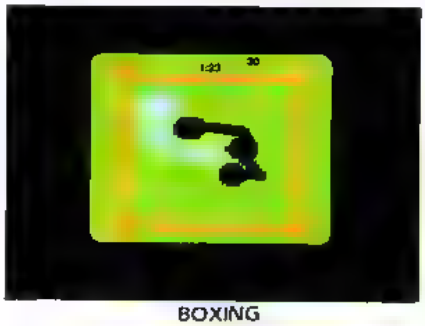
Breakthru, though a little less challenging than **Breakout**, can easily become an addiction. It's great for head-to-head competition, since a best three-out-of-five series takes less than a half-hour, and it's also a lot of fun solo. Unfortunately, many gamers find their skill improves so much as a result of constant play that they are able to clear both walls with just one ball. If that happens to you, returning to **Breakout** may provide fast relief—and a new lease on life for the cartridge.

BREAKOUT

Boxing (ActiVision/AG 002) is the first cartridge devoted to the fistic scene—and it's a real knockout. Video managers maneuver their boxers, colored black and white for easy identification, in the clinches, around a ring viewed from overhead.

To keep the game from wallowing in complexity, the computer assumes the chore of punch selection. The gamer decides when to throw leather by pressing the action button, but the system then selects the appropriate blow in light of the two boxers' relative positions within the ring.

Rounds last two minutes instead of the regulation three, but this is probably due to the kindness of some generous soul at ActiVision. Only Rocky could survive 15 of these grueling rounds without needing a thumb transplant. The on-screen pugilists could probably batter away at each other forever, but the human managers will need a breather between rounds. A little experimentation indicates that three rounds for a preliminary and five for a main event make good matches.



BOXING

Stick and run is the best tactic in **Boxing**. Keep throwing the jab, and try to dance away from your opponent's long-range bombs. Flat-footed sluggers haven't got a prayer in this one.

Once the other boxer is immobilized against the ropes or in a corner, it's time to have your man bore in for the coup de grace. Keep the action button pressed to pound out devastating combinations. Normally, the computer forces a fighter to back up a little and get out of harm's way when he takes a solid punch, but this is impossible if the pugilist has nowhere to escape. Show no mercy.

Knockouts occur when one boxer scores 100 points in a single round. If that happens, look carefully—your opponent may have left the room to get a soft drink or something. On the other hand, scoring less than 50 points suggests that the manager should adopt a more aggressive strategy in the future.

Alien Invaders—Plus! (Odyssey/IB 3634-1) makes excellent use of the basic **Space Invaders** concept to produce a game that's different enough to be great fun.

The gamer employs the joystick to move a horizontally mobile laser cannon—and its robot gunner—back and forth across the bottom of the playfield. Poised overhead is a line of eight evil robots, each operating a gun and protected by an impenetrable shield. The defender has some protection, too, in the form of three huge blocks that stop laser fire in either direction.

The aliens also have a lethal leader in the form of the Merciless Monstroth. It starts the game as a sort of unearthly cheerleader, scutting back and forth behind the android legions. All too soon, however, it abandons this passive role and swoops low over the lone defender to drop loads of deadly bombs.

The worst thing about the Monstroth is that it is as unkillable as it is merciless. If there's even one evil robot left on the screen, the horrid creature regenerates within seconds after taking a seemingly deadly blast from the laser cannon.

When the cannon is hit by enemy fire, it leaves the robot operator completely unprotected against killing laser blasts from above. Moving the defender directly beneath one of the big square shields converts it into a new cannon. After the invaders destroy the fourth cannon, the little robot might as well surrender, because there is no way of returning fire at this point in the game.

The arcader wins a round in the ongoing war against the aliens by clearing the entire playfield of enemy robots. The computer scores a point every time the defender fails to accomplish this goal. When one side accumulates 10 victories, the war is over and trumpets salute the victor.

Some gamers may look at the thin line of eight attackers and conclude that **Alien Invaders—Plus!** is a pushover. Not at all: it's actually a good deal more difficult to play than **Space Invaders** itself.

Winning is a lot easier before the Monstroth starts mixing into the affair, so players must work rapidly. Put the enemy's lasers out of commission first to create "safe zones" for the defender, and then go to work on dispatching the invading robots. Since the Monstroth has no direct effect on scoring, ignore it until it actually begins its low-altitude bombing runs. When the creature does activate, however, it must be dealt with regularly and repeatedly, or it will get the defender sooner or later.

Not just a weak-kneed **Space Invaders** rip-off, **Alien Invaders—Plus!** is an exciting and entertaining videogame in its own right.

Every arcader can be a Luke Skywalker with **Space Battle** (Intellivision/2612), one of the few videogames that combines strategic and tactical elements in the same cartridge. The way in which the three defending fighter squadrons, each with three spacecraft, are deployed to protect the mothership is as important to ultimate victory as a steady hand with the laser during the ship-to-ship combat portion.

The strategic playfield shows the mothership in the center of the screen, threatened by five enemy fleets with up to 15 ships in each. Pressing the clearly marked alien key on the controller allows the arcader to select a target. The player can then dispatch the red, white or blue squadron by pushing the appropriate section of the overlay. When a defending group reaches the attacking fleet's position, both symbols will begin flashing on the screen.

This is the cue to push the "go to battle" button that switches the action to the tactical display. The arcader is now in the cockpit of one of his fighters. The beautifully drawn alien ships not only dodge your laser fire, they also blast back at you with lasers of their own.

The screen automatically returns to the strategic playfield when an entire alien flotilla is vanquished, or when the gamer pushes the radar key on the controller overlay. Another button is used to return a squadron to the mothership for later reassignment.

In routing the defending squadrons it is important to avoid two simultaneous battles whenever possible. The computer will automatically conduct any engagement in which the player doesn't take active control of the fighters, but the machine essentially exchanges one fighter for three attackers. Since the player needs to destroy at least five foes for every defending ship lost, it's clear that the computer should be permitted to lead a squadron into battle only in the most dire emergency or as a delaying tactic.

The game can be played at any of four speeds. The second-slowest is a good one at which to learn **Space Battle**, and only the hottest space warriors will stand a chance against the invaders at the fastest play speeds.

Most videogamers will find **Space Battle** a refreshing change from the more straightforward type of outer space shoot-out. The need to orchestrate the sequence of battles adds a thrilling dimension to what would be an exciting game in any case.

Video Whizball (Zircon-Channel F/C020) was one of the last—and best—cartridges Fairchild produced before abandoning its programmable videogame system. Now that Zircon is marketing the Channel F, **Video Whizball** may finally get the acclaim it richly deserves.

The concept is astonishingly unique, the audio and visual effects are adequate, and play value is excellent.

Each gamer controls a vertically movable paddle in front of a goal at either side of the playfield. The paddles aren't defensive in nature, as veteran arcaders might expect. Instead they shoot "whizballs" at a large free-floating block. Gamers fire at the floater from three angles—upward, downward and horizontally—in an attempt to shove it through the opponent's goal. The action is somewhat reminiscent of the old commercial arcade game in which players direct air or water guns at ping pong balls.

The fun really begins when more than one floater appears on the screen at a time. In the ultimate version, as many as four of these big, dumb blocks are bouncing around the field, creating all kinds of havoc.

When a player's paddle is hit by either a floater or a rival's whizball, it disappears from the screen for a short interval as a penalty. Of course, that leaves the goal open to attack.

Players can't fire again until the previous whizball strikes something. When the floater is very close to a paddle, however, the defender can loose a series of whizballs with machine-gun-like rapidity.

This is really a good game, especially in light of the limited graphics capability of the Channel F system. There is no similar limit on the inventiveness of the designer who created **Video Whizball**, and Zircon should be thanked for resurrecting this excellent cartridge.

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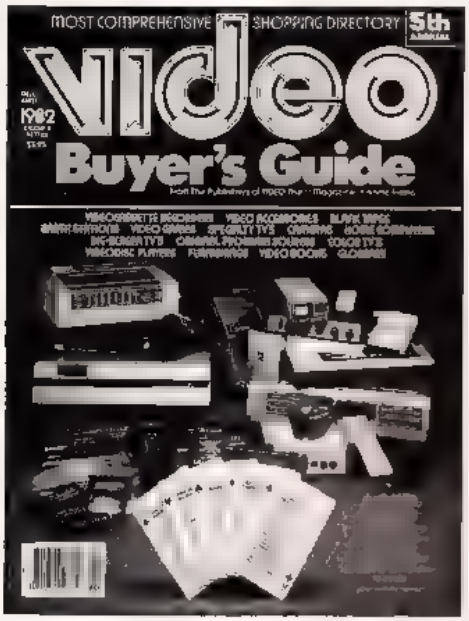

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inside gaming

continued from page 12

The Chicken was an instant favorite with the otherwise bored Padres fans who has hatched himself quite a career as the mascot of the perennially fowl Padres National League baseball team. He has since gone on to national fame, appearing at all sorts of sporting events, on commercials and even in network TV specials. In short, he's become a household face, er beak.

So it sounded like a natural for Activision and the Chicken to get together to promote this fantastic new game.

Alas, the deal with the Chicken fell through. But the idea of using on-screen chickens proved irresistible. It's the perfect audio-visual punchline to one of the world's oldest jokes. "Why did the chicken cross the road?"

Activision president Jim Levy fitted the final piece in the **Freeway** jigsaw puzzle. Crane had wanted to offer several different roads to challenge arcaders, and it was Levy who suggested that Activision check out traffic patterns on major highways across the nation.

"We had to make some adjustments," Levy concedes, "since they weren't all 10-lane highways. But this way, players all over the country have the opportunity to get their chicken across a familiar roadway."

This touch of local color works perfectly. Gamers can guide their video-chickens over such beloved stretches of blacktop as Lake Shore Drive in Chicago (of course), the Santa Monica Freeway in Los Angeles and New York's infamous Long Island Expressway. Each highway is represented by a traffic flow typically found on it at a specific time of the day or night. Morning hours feature mostly truck traffic, for example, while rush hour scenarios fill all the lanes with vehicles.

While most home video games are either re-workings of classic themes or translations of coin-operated winners, **Freeway** stands out as wonderfully, joyously original. Nothing else is quite like it. Which stands to reason, because its inventor Dave Crane is also one of the true originals in the electronic game design field.

Oh, and in case you were wondering, the chicken in the joke crossed the road in hopes of earning enough points to receive Activision's award for **Freeway** excellence—The Pullet-ser Prize. ★

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COMPUTER PLAYLAND

Software for the Apple II was tested at The Computer Center, 480 Lexington Avenue, New York, N.Y. 10 67. Computer Center, which also has a second location at 31 E. 31st Street, offers a huge assortment of games for all popular computers in its stores and by mail order.

Software for the Atari computer was tested on an Atari 800 48K machine or on an Atari 400 upgraded to 32 with an Axion Ram-cram.

Star Raiders (Atari/Atari 400 & 800) is the game that, in the opinion of many, sells a lot of 400 computer systems for the Sunnyvale, Ca., manufacturer. Not that other excellent software doesn't exist, but it's **Star Raiders** which best demonstrates the outstanding videogame and computer capabilities of the 6502-based machines.

Star Raiders is a brilliantly conceived, state-of-the-art program that has established the standards prospective software marketers will be trying to surpass over the next year or so. It's similar to the trek-style science fiction programs that are a staple of computer gaming, but it is far superior to all past efforts in this field.

The **Star Raiders** experience begins with the selection of one of the four missions—Novice, Pilot, Warrior or Commander—each a little more difficult than the preceeding one. In the Novice mission, the Zylons don't fire back, so this is a good level at which to get the intricate play mechanics down pat. Space knights will want to move up to the Pilot mission as soon as possible to enjoy the full flavor of the contest.

After the arcader engages the shields ("S" on the keyboard) and computer ("C"), it's time to punch "G" to bring the galactic chart up on the viewing screen. This grid shows the locations of friendly starbases and the various Zylon attack squadrons. The same field also furnishes helpful data concerning the energy cost of hyper space travel, damage control and the current star date.

To travel between sectors, the pilot uses the joystick to position the cursor over the desired destination on the galactic chart. Pushing "F" to switch to a

front view of normal space, the arcader then powers up the hyper warp engines. **Star Raiders'** single most breathtaking visual is the jaunt through null-space. It's a science fiction vision straight from "Star Wars"!

When the ship arrives at a Zylon occupied sector, the screen flashes red, a klaxon sounds and the machine prints out a "Red Alert" warning. And that's where **Star Raiders** diverges from the run-of-the-mill strategic simulation. The cartridge also boasts a tactical combat phase in which Zylon fighters dive toward the earth ship's front screen, disappear momentarily and then reappear on the rear screen zooming into the vastness of space. Alien vessels crisscross in the distance and then zoom toward the single defender for the kill.

Zylon craft come in three varieties: fighters, cruisers and basestars. The latter aren't as mobile as the other two types, but they have shields capable of turning back all but close-range attacks. And the basestars are deadly at that distance.

If the arcader's ship sustains damage or is just low on energy, docking at a friendly starbase will set things right. The docking sequence is a particularly nice bit of animation in which the starbase sends out a small shuttle which floats over to the ship and readies it for re-launch.

Even this description can't catalogue all the fine details included in this outstanding program. There is variable impulse engine power for movement within a space sector, ion beam weaponry, a sub-space radio to report on battles taking place in other parts of the galaxy, a sector-scan display and much, much more.

In fact, **Star Raiders** offers so many activities that up to three gamers can cooperate on a single adventure "Star Trek" fashion. The crew's videogame ace can handle the joystick, steering and firing as needed. A computer-oriented player can take charge of the console governing the ship's velocity and jumping back and forth among the various displays. The third member of this hypothetical **Star Raiders** team gets to sit back in the command chair, offering strategy hints and coordinating things. Of course, it is perfectly possible to play solo, too.

The best strategy for ending the Zylon threat is to attempt to anticipate the enemy's computer-directed moves. Use the galactic chart for this, as a quick

The Computer Spaceship Flies!

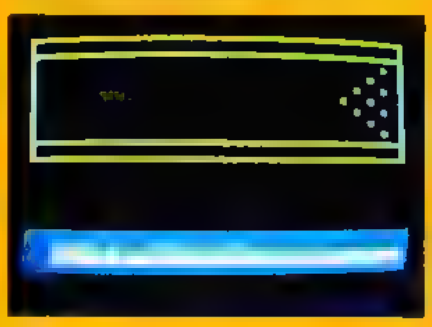
analysis will usually suggest which starbase is under the most immediate threat.

While energy is there to use, it should also be conserved to a certain extent. Not only is energy consumption one of the factors the computer considers when arriving at your final rating, but efficiency in this regard will reduce the need for frequent "pit stops" at friendly starbases. On the other hand, all but the slightest damage should be repaired as soon as practical. A ship without shields isn't going to be much more than a juicy target for a pack of Zylon tie-fighters. And don't forget the sub-space radio, without which it is possible to blunder around in one corner of the galaxy while the invaders wipe out a starbase undetected in another sector.

If you haven't enjoyed a **Star Raiders** mission yet, do so at once. Then you'll know how pulse-pounding a computer game can be. (Bill Kunkel & Frank Laney)

Bowling (PDI/Atari 400 & 800/16K) is a very interesting cassette from a company that is better known for educational software. Obviously, someone at the company plays hookey from the schoolwork, because this is certainly an excellent sports simulation.

Players enter their names on the electronic scoresheet in the order in which they desire to play. This done, the computer switches to an overhead view of an alley with a bowling ball moving from side to side at the foul line. There are three play variants, each offering a different type of action. In the simplest, the ball travels in a straight line from the point at which the gamer presses the action button. The second option allows pin-blasters to hook the ball. The third one retains the hook, but this time the ball is invisible until it is actually heading down the alley.



Graduates of the Atari VCS **Bowling** cartridge should be warned that this version of **Bowling** features a realistic hook, instead of turning the ball into a 16-lb. guided missile. It's just a gentle nudge, pretty much as in real life.

After each bowler completes a frame, the computer switches to the scoresheet for a recap. This may well be **Bowling's** best feature. Many other programs offer only cummulative scoring or, at most, a notation of strikes and spares. This one furnished a complete scoring line, just the way you'd fill it in yourself.

The color graphics are simple, yet quite effective in conveying the flavor of Ten-pins on the home screen. Come to think of it, perhaps PDI intends **Bowling** as a reward for electronic gamers who've already finished their computerized lesson. (Bill Kunkel)

House of Usher, Beneath the Pyramid and **Sands of Mars** (Crystalware/Atari 400 & 800, Apple II, Pet, TRS-80) are the first trio of releases from one of the most controversial new software publishers. The company's ads promised lavish 3-D graphics and an incredible gaming experience. Although the announced titles carried higher pricetags than most other computer games, anticipation ran high. Clearly, more arcaders were turned on by the concepts than were turned off by the cost.

Fans deluged computer stores with orders, but Crystalware seemed somewhat unprepared for its success. When slowly filled orders finally reached gamers, they were horrified to find that serious programming errors marred the premium-priced games.

"We sold 20 copies of **Sands of Mars,**" one retailer confided to **Electronic Games,** "and 19 of them came back. No one wants to pay $40 for a game and then have to correct the programmer's mistakes."

In fairness, what might first have looked like a rip-off may have resulted from unintentional foul-ups. Owner/designer John Bell is now making a sincere effort to untangle the mess. Copies of the game in the stores today are reportedly error-free. Undoubtedly, gamers who bought defective ones will find Crystalware anxious to rectify any problems.

Sands of Mars begins in a spaceport where a captain (the player) has just secured financing to buy supplies and hire a crew for a trip to the Red Planet. The crew travels to the launchpad in a truck, gets out and walks toward the waiting rocket. The playfield then shifts to a representation of the ship's bridge, where a viewscreen provides instructions for take-off.

By this point, the typical gamer is drooling over the marvelous graphics. After the blast-off, the ship navigates through a beautifully rendered version of outer space. But when it finally reaches its destination, the game sinks beneath the Martian sands, carrying all its bright promise with it.

The Martian phase of the game is provided on a separate disk, and the arcader will realize instantly just **how** separate once the program loads. The visuals in this section suffer badly in comparison to the treats contained in the first half of

Sands of Mars. Once on Mars, the player solves the mystery and heads home bitterly disappointed.

In **The House of Usher**, a graphically enhanced adventure, the electronic explorer has the run of a mysterious mansion populated by over 100 different monsters. The mystery to be solved during the course of a rambling tour of the 40-room chateau is explained in the instruction folder that comes with the game. Unfortunately—and utterly inexplicably—this crucial information is printed in French.

An exotic Arabian bazaar is the starting point for **Beneath the Pyramid**. There the intrepid arcader may buy the supplies needed for an expedition to the nearby pyramid.

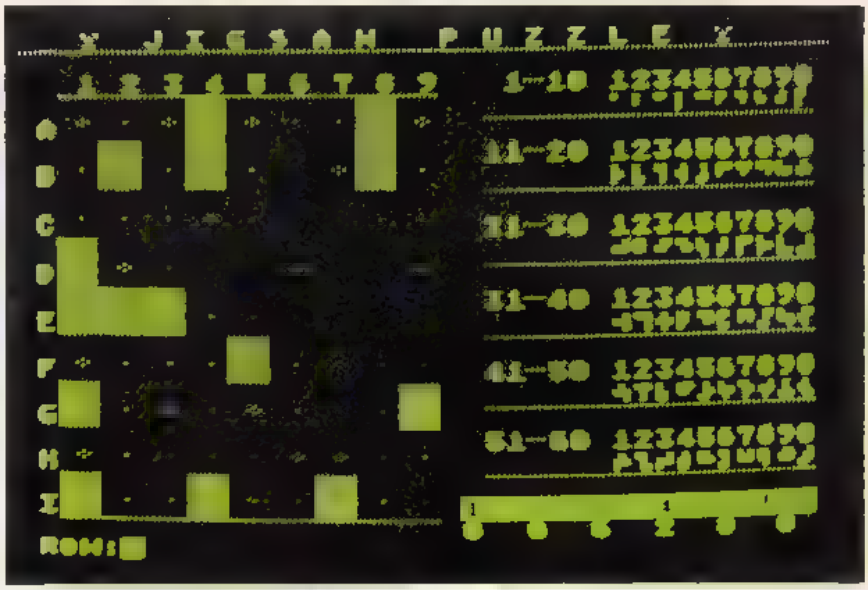
Once within the stone walls of the mighty tomb, the adventurer is free to wander through four levels, each composed of a different maze, in search of a golden cat idol.

The latter two games make better-than-usual use of Atari's strong graphics and contain no glaring programming fiascoes in their current editions. While **House of Usher** and **Beneath the Pyramid** are a little more expensive than some software, they are also of higher quality. And all arcade addicts will want to keep an eye peeled for future Crystalware releases, because this company may well give us some sensational games once it gets its act together. (Frank Tetro)

Nominoes Jigsaw (Dynacomp/Apple II Plus, Atari 400 & 800 and TRS-80) a brain-teaser supreme in the form of an electronic jigsaw puzzle. Would-be solvers attempt to fit 60 oddly shaped pieces, pictured on screen at all times, into a nine by nine grid.

Nominoes Jigsaw has three levels of play, with three options available at each level. The computer generates a new puzzle every time, making it very unlikely that a duplication will occur. Once the picture is properly assembled, the program rates the solver's ability based on three factors: the amount of elapsed time, the number of guesses and the difficulty of the puzzle completed.

The audio and visual effects are quite satisfactory, and designer Jerry White has used a BASIC/machine language mix to shorten response time. Random puzzle generation is certainly a big plus,



as is the posting of the current high score.

The concept of **Nominoes Jigsaw** is brilliant. This video jigsaw game is so clever and completely original that only the most hard-hearted puzzle-hater could fail to be charmed. (Frank Tetro)

Space Chase (Swifty Software/Atari 400 & 800/16K) combines a highly original design with first-rate play values to forge a certifiable computer arcade classic.

Gamers pilot an on-screen space ship around a star- and planet-studded galaxy, which is patrolled by tie-fighter-like alien craft. Up to three asteroid bases serve as launching pads for the enemy. The player must conquer all the planets by passing the space ship over them, while destroying or avoiding the tie-fighters.

The space ship has shields and can set mines, but scrolling off the screen is probably the best defense. The patrol ships can't pass beyond the boundaries of the galaxy, while the gamer's craft can exit the screen on one edge and return via the opposite one at will.

Space Chase becomes progressively more difficult as the action continues. Only one asteroid base is active in the first round, two in the second and three in each one thereafter. A base will automatically send out a new patrol ship as soon as the arcader destroys the previous one. When all three bases are pumping out those tie-fighters, **Space Chase** gets pretty wild.

Designer Fernando Herrera has given this game better sound and graphics than all but a handful of computer software products. For a BASIC language program, **Space Chase** has surprisingly quick joystick response. This goes far to make a dexterity game like this an enjoyable arcading experience. (Bill Kunkel)

War at Sea (Custom Electronics/Atari 400 & 800/16K cassette or 24K disk) brings the boardgame classic **Battleship** to electronic arcading. Video admirals lob shells at a 10 x 10 grid—and then bite their nails waiting for the computer to fire back.

After the human player and the computer have keyed in the initial positions of their fleets, play procedes in the familiar, alternating turns manner.

Every vessel can withstand two to five hits. The exact number, as well as the current damage status of every ship, is indicated by a summary printed to the right of the actual playfield.

Althought the pictures are nothing special, the designer has gone to unusual lengths to provide the game with appropriate audio accompaniment. This starts with an opening chorus of "Anchors Aweigh" to put the arcader in the proper mood and continues through the whole game. Torpedoes, for instance, are launched with a satisfying

"whoosh!", and the metal fish can even be heard cleaving through the water toward their targets.

Those who like the original boardgame—a group that certainly includes many young gamers—are bound to enjoy **War at Sea.** (Bill Kunkel)

Alien Rain (Broderbund/Apple II/48K) is a dynamic home arcade version of the coin-op hit, **Galaxian.** Players fire at the bat like alien invaders with a horizontally mobile spaceship situated on the lower edge of the playfield.

Unlike original **Space Invaders,** the creatures here don't merely jiggle from side to side waiting for a sharpshooter to mow them down. The aliens will suddenly sprout huge wings, break formation and execute a dive-bombing run against the harried defender.

In terms of its sound and graphics, this program is just about at the commercial arcade level. It falls short only in its execution speed, which is slightly slower than **Galaxian** fans really like. Nonetheless, **Alien Rain** is currently the best available home edition of this highly popular coin-op classic. (Bill Kunkel)

Asteroid Field (Cavalier Software/Apple II/48K) attempts to bring the excitement of **Asteroids** to Apple owners. This is not an easy goal to accomplish, much harder than translating **Galaxian** into microcomputer form. That's because **Asteroids,** in its coin-op incarnation, uses the quadrascan monitor to perform some of its most ingenious electronic miracles. A computer game, however, must operate within the limits of ordinary rasterscan monitors.

Which makes **Asteroid Field** an even greater triumph for Cavalier. It can't be exactly like the coin-op version, but it's close enough to satisfy even the most discriminating arcader.

Play procedure should be familiar to just about everyone who likes electronic amusements. The gamer pilots a ship threading its way through a region of outer space overrun with debris. The ship can be rotated either clockwise or counter-clockwise—or the pilot can apply thrust to move it forward. The idea is to blast any asteroids that get in the way, making low-scoring large rocks into the high point-value tiny ones in the process. (Bill Kunkel)

Mystery Fun House/Adventure #7 (Adventure International/Atari 400 & 800, Apple II, Sorceror and TRS-80) is, obviously part of the on-going series of text adventures by Scott Adams which has already reached its 10th installment. In a sense, these programs, which have no computer components, are like radio in comparison to videogame's TV. Still, they can give gamers who like solving tricky puzzles many hours of fun.

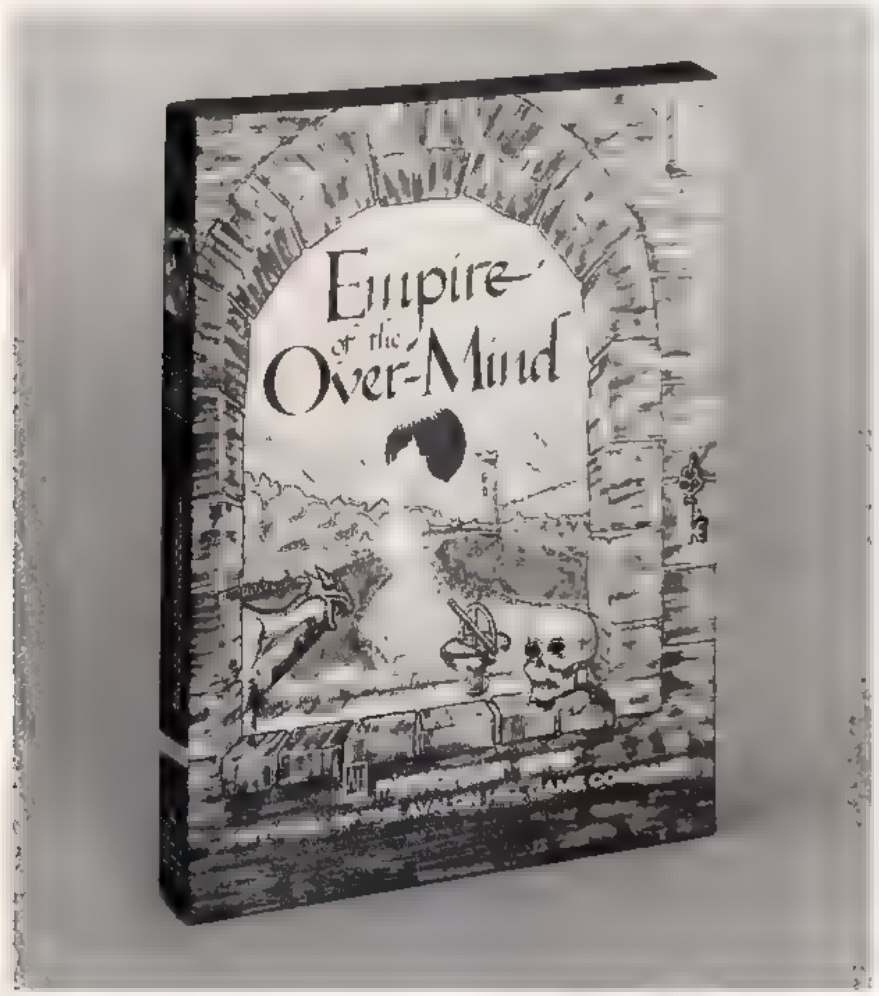
Actions are initiated using simple commands. Usually these short messages are typed into the computer in the form: verb noun. For instance, the monitor prints out the fact that the player is standing in a room containing only a desk. The order "Look desk" would produce a sentence of reply from the machine indicating that there's a note on the desk. Following this up with "Read note" results in the computer spitting out the message contained in the note.

Mystery Funhouse requires the arcader to retrieve a set of hidden plans from their resting place somewhere in the funhouse. Of course accomplishing the feat may not be quite as easy as it sounds.

The game display is divided into two fields. The upper one summarizes present location, possible directions of future travel and objects visible at the time. The other reproduces the gamer's commands and, thanks to the game's machine language programming, prints out answers fairly quickly.

The instructions provide a list of the verbs that will elicit a response from the computer during **Mystery Fun House.** This is, in a sense, a hint to the players about what will work—and what won't. (Scott Adams has recently made available hints that provide more concrete help if you get stuck.)

Mystery Fun House is not recommended for beginners. The puzzle is a tough enough nut to crack without the additional handicap of not knowing the basic procedures of text adventuring. For those who know their way around such fantasy realms, however, **Mystery Fun House** should provide a rousing good time. (Frank Tetro)



Empire of the Over-Mind (Avalon-Hill/Apple II, Atari 800, Pet and TRS-80) refutes the notion that only dexterity games can be exciting. It's certainly true that graphics and sound enhance play to a great extent, but this super-duper text adventure packs a full measure of thrills although it has neither. In fact, most players will want to turn off the volume on their television sets so they won't be distracted by irrelevant beeps and boops. (Of course, putting the soundtrack from "Lord of the Rings" or "Empire Strikes Back" on the stereo to set the proper mood isn't a bad idea, either.)

The object of **Empire** is to seek out and destroy the sinister Over-Mind. This mysterious intelligence has bribed, conned and muscled its way to control of the kingdom—and the adventurer is mankind's last hope.

Saving humanity is accomplished, as in most such games, by journeying from place to place within a intricately detailed realm, solving puzzles, finding treasure and enlisting allies. This program puts would-be heroes in some awfully tight spots at times, and it is certain to take many run-throughs before the electronic champion is ready to fulfill his mission.

The instruction booklet for **Empire of the Over-Mind** is, frankly, nothing to write home about. This is too often the case with computer adventures. Frequently it's that a software company has acquired much more skill at creating a playable program than in writing rules. Considering the expertise available at A-H—the number-one publisher of adult strategy games—it ought to be possible to provide gamers with a little bit more detail about the fantasy world they're about to enter. It must be admitted, though, that the rules are at least complete, if not exhaustive.

Empire of the Over-Mind is a splendid evening's entertainment for the solo player—or for a group of back-seat adventurers, if you've got a crowd in the livingroom. (Frank Laney)

Dino Wars (Radio Shack/TRS-80 Color Computer/4K) will amuse those who can get past the fact that it lacks the scintillating graphics used in software designed for some of the other home computers. **Dino Wars** pits two arcaders against each other in an aggressive, law-of-the-jungle fight for survival.

Dino Wars is a video game exercise in maneuvering a clumsy cartoon beastie into position to bite the other one on the neck from behind. In fact, just roar at the rival saurian from the proper position, and it yawps and falls right over with a great thump—and the fallen dinosaur's human master loses 20 points.

The dinosaurs, colored red and blue, are shown on the screen in six basic positions: direct right or left, forward right or left and back right or left. Each stance is shown in varying degrees of resolution, depending on how close to the foreground the creature is. Considering that all curved lines are definitely stair-steppy, the designer has endowed the dinosaurs with an amazing amount of personality.

By using the joysticks—which don't have the customary automatic centering feature—the dinosaurs can be moved about the playfield in three dimensions. The combatants, who begin the contest with 100 points, must be near each other on the screen and roughly the same size to land telling blows.

Cacti located toward the background of the playfield present a hazard to the dinosaurs. The brutes tend to fall down when they blunder into one, causing a five-point deduction. What's more, a downed dinosaur is vulnerable to its foe's bite and roar.

Dinosaurs can move off screen at any time. The screen slowly pans after one—or both—of them, while a clip-clop sound represents the out-of-sight activity. If a saurian continues to travel in the same direction while outside the playfield, it eventually re-enters the screen from the opposite edge. The game ends when a dinosuar has lost enough fights—or bumped into enough pesky cacti—to use up its stock of points. The action immediately stops, and the defeated dinousar lumbers into the distance, squawking sorrowfully. The title page then returns. It presents a listing of how many games each dinosaur has won during the entire play session then in progress. —Ross Chamberlain ★

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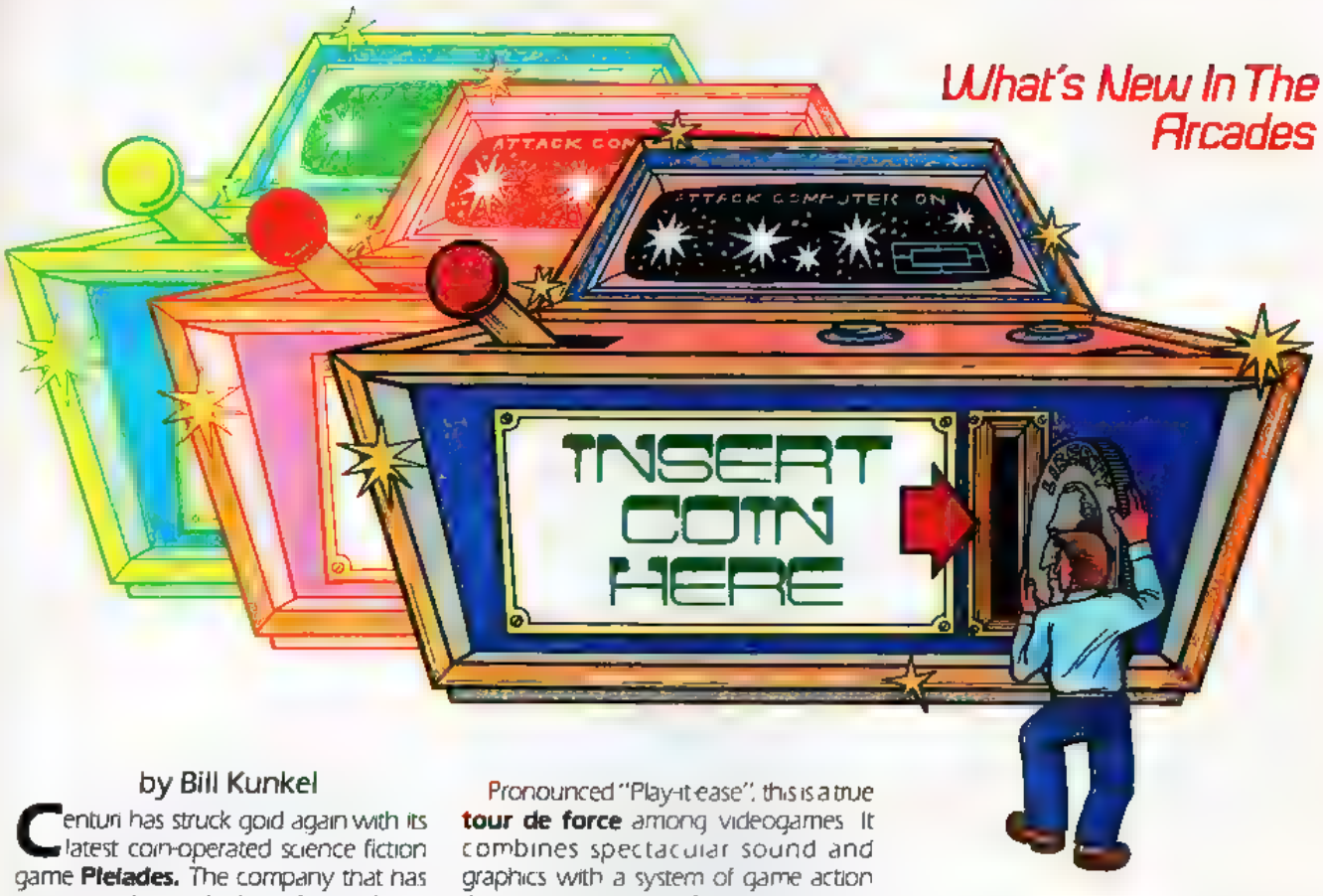
What's New In The Arcades



by Bill Kunkel

Centuri has struck gold again with its latest coin-operated science fiction game **Pleiades.** The company that has given arcaders such delightful machines as **Route 16, Eagle** and **Phoenix** has more that kept up to its own high standards with this latest release

Pleiades

Pronounced "Play-it-ease", this is a true **tour de force** among videogames. It combines spectacular sound and graphics with a system of game action that is simple enough for even a novice player to grasp easily. Those who find the controls of some of the newest coin-op machines a bit daunting will probably feel a little more welcome when they step up to try this one.

Pleiades, named for the constellation in the northern sky, sends gamers on a multi-phase mission. They must battle a series of alien invaders, maneuver through an outer space minefield and return to earth with a whole skin.

Pleiades is what many have started calling a "greatest hits" videogame, similar in overall style to Midway's already popular **Gorf.** Each phase of **Pleiades** challenges gamers with a new and different playfield, decked out with graphics those with good memories will recall from **Eagle** and **Phoenix.**

The longer the arcader keeps playing, the more wondrous sights flash across the monitor screen. Great, bird-like aliens burst into flame and crash to the ground in a wild pyrotechnique display when hit by laser fire. A mighty wall of flame supports the ship and the nasties pass through this barrier of fire to attack. Finally, the human spacefarer must navigate the minefield to dock.

Once **Pleiades** proceeds this far, an SOS message flashes on the screen, ordering the player's ship back to earth. The entire adventure begins again, but this time at a much higher level of skill.

Each of the game's phases achieves its own unique identity. This makes a refreshing change from other games that repeat on a very short cycle and can become hypnotically repetitive when someone is really tallying up the points.

And this is more likely to happen than on some of the other recent commercial arcade games. **Pleiades** is neither simple nor childish, but it is just a shade easier to gain some mastery over it. That means no wasting a handful of change while learning the rudiments of strategy.

Centuri hasn't broken any major new ground with Pleiades, but there's no denying the fact that this relatively new outfit has once more produced a highly playable coin-op winner. ★

Space Odyssey (Sega/Gremlin)

Sega/Gremlin is responsible for producing some of the most graphically innovative coin-op electronic games around. It continues the quest for visually

exciting programs with good play value with its latest entry, **Space Odyssey**. The colors are soft and pale, utterly unique in the realm of videogame visuals. The color system in **Space Odyssey** is capable of generating 256 hues, every one of which appears to flash across the screen at some point during the course of this multi-part science fiction adventure.

Like the popular **Defender**, **Space Odyssey** lets arcaders pilot a rocket—controlling the speed, direction and altitude—over an exotic, scrolling unearthly landscape. Among the menaces threatening the gamer are UFO bases which launch small diamond-shaped craft and a humungous mothership that is capable of absorbing several direct hits without sustaining damage.

Once the **Defender**-like horizontal phase is successfully completed, several vertically-oriented rounds of action commence. The first has the arcader viewing an alien city from above, while the following two sequences take place in outer space. Adventurers must face this final pair of challenges with an empty gun, players must guide unarmed ships past black holes and careening meteors.

Complete all these phases and the game begins anew—at a higher level of difficulty, naturally.

Venture (Exidy)

Get ready for the next Big Thing in commercial arcade machines: fantasy adventures! As science fictional videogames begin to super-saturate the coin-op parlors, designers have been searching for new directions in which to go.

Fantasy adventures, role-playing games, dragon-slaying and heroic quests have been hot media topics for over a year now. Just as "Star Wars" launched the science fiction boom a few years back, films like "Dragonslayer", "Knightriders", "Excalibur" and even "Raiders of the Lost Ark" are piquing nationwide interest in "adventure" simulations.

Exidy's latest entry, **Venture**, is the first coin-op to reflect this emerging trend. It combines high-resolution graphics, innovative design and first-rate sound effects in an attempt to recreate the "what's-in-the-next room?" appeal of computer text adventures in a highly visual context.

The game scenario concerns a mammoth four-level haunted dungeon. Each level contains many halls, rooms and chambers. Gamers will discover hidden treasures, damsels in distress and monsters of every description. There are puzzles to solve, goblins to slay and a fair maiden to impress.

It remains to be seen whether adventure coin-ops will ever rival science fiction arcade machines in popularity. But if more games of **Venture**'s high quality are produced, this new type of commercial arcade game is certain to be successful.

Warlords (Atari)

If you've only played the home version of **Warlord**, this coin-op newcomer should prove to be a pleasant surprise. It is perhaps the most visually sensational videogame ever designed.

Through the creative use of colored overlays, Atari has made **Warlord** a feast for the eyes. A castle rests in each corner of the playfield with the region's monarch—seen from overhead—inside. Players guard their warlords with a combination shield/catapault that moves freely over the exposed half of the outer wall.

Suddenly, a monstrous dragon appears on the screen, breathes a gigantic fireball and spits it into play! The fireball roars across the field, flaming tail in its wake, destroying bricks in any castle wall it touches. Players must either deflect the redhot missiles or catch them—and then shoot them into play again, this time toward a rival citadel.

When **Warlord** gets going full-tilt, there can be up to four fireballs bounding around the screen. Action at this point can only be described as "Hectic".

Here's one game that sounds as exciting as it looks. Fireballs hiss, reflecting shields emit a ping and dragons roar in a medley of noise.

Again, you've got to see **Warlord** to believe it. The VCS version is a delightful variation of **Breakout**, but its coin-op big brother is sure to restore your arcading sense of wonder. ★

computer playland

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Lords of Karma (Avalon-Hill/Apple II, Atari 800, Pet and TRS-80) is something a little bit different in the way of text adventures. Instead of scooping up treasure, players attempt to qualify for ascension to heaven by displaying their charity and bravery.

Oh, there are plenty of creatures—and evil-doers—to smite, but there are also brownie points to be gained for giving alms to the poor and evidencing piety.

The protagonist begins the adventure in the central square of Golconda, a walled city surrounded by forest and situated near the Ocean of Storms. The hero is then free to wander through the sprawling and diverse realm.

Players enter their commands using short, two-word phrases. These usually consist of a verb followed by the noun which is to receive the action. The instruction folder doesn't disclose what most of these commands are, so adventurers should expect to spend the first couple of play sessions trying to figure out what will work and what will draw only a puzzled response from the computer.

One helpful feature is that travel in any direction—North, South, East, West, Up and Down—can be accomplished by typing in only the first letter of the operative word. That is, "N" works just as well as "Go North".

This is especially nice, since the computer responds to the command "Look" by printing out what lies in all six directions.

A typical segment of play might go something like this (player's moves in **boldface**):

You are in Golconda's central square.
Look
North: A Gate
South: A Street
East: A Wall
West: A Golden Door
Up: The Sky
Down: The Ground
You are in Golconda's central square.
N
You are at the north gate of Golconda.
N
You see a man in rags. You are in a narrow valley.
Talk man
The beggar says, "Alms for the poor?"
You are in a narrow valley.

In a typical **Lords of Karma** adventure, the player might be sent on a quest by the king to rescue his daughter, fight and kill her kidnapper, return the princess to the palace and get a handsome reward.

Though some may find the computer a little terse, particularly compared to Avalon Hill's own **Empire of the Over-Mind**, **Lords of Karma** provides an unusually wide variety of adventuring experiences in a single program. Definitely a stand-out among text adventures. (Frank Laney)

Gorgon (Sirius Software/Apple II/48K) is another winner from ace designer Nasir in which gamers pilot a spaceship over a strange, alien horizon. The mission: to protect the helpless humans who dot the landscape from the hideous winged harpies that haunt this world.

This is a fine home version of the popular coin-op game, **Defender**. The only major defect here is not the designer's fault, but rather must be laid at the Apple II's doorstep. As all owners of this otherwise fine personal computers know, Apple doesn't make joysticks. This means that game programs must be compatable with the paddles supplied with the system.

To simulate joystick-type control, the "A" and "Z" keys have been assigned to control vertical movement, while the horizontal direction keys handle side to side action. The space bar functions as the firing button.

What with fingers slipping off keys periodically and the general distortion of direction, what would otherwise be a spectacular joystick game becomes overly complicated. Perhaps the joysticks offered for the Apple by other vendors could provide a solution to the problem and allow arcaders to fully enjoy **Gorgon**. (Bill Kunkel)

Horseracing (CE Software/Atari 400 & 800/16K), by Jerry White, is a remarkably appealing program with plenty of gambling action.

The six realistically rendered horses are called to the starting gate by the blare of trumpets. The steeds, saddled with names like Knot2Knight and Eyegofast, go off at odds ranging from 3-1 to 8-1. The favorites win more often, but they don't pay off as well. Players make their picks and key in any desired wagers.

The field races on a straight track—marked at the quarters—located at the top of the playfield. The gamer's complete lack of control over the horses increases the excitement level as well as lending a touch of realism to the proceedings.

This is definitely a "more the merrier" program. It's probably best with four bettors. The computer keeps track of the winnings and losings, so even the group's mental math whiz can relax. (Bill Kunkel)

Space Trader (Spectral Associates/TRS-80 Color Computer) is an electronic board game of commerce, stock deals, mergers and good old cutthroat competition. Space doesn't really have much to do with the game, but who cares?

Two to four can participate. Each round, the computer randomly offers a player a choice of five possible locations on which to build an outpost. (Space Trader is played on a 9 x 12 grid dotted with red stars.)

There are essentially three types of outposts. Unattached ones are not adjacent to a star, outpost or existing shipping lane. A second posibility involves choosing an outpost that is next to a star or unattached outpost and establishing a new shipping lane.

Only five such lanes may exist in the game at any one time. The TRS-80 assigns each new one a name in alphabetical order as a mnemonic for players.

A third alternative, after shipping lanes have already been formed, is to merge two existing ones by selecting an outpost site adjacent to both.

The program makes good use of on-screen graphics to help participants check any location's status at a glance. Unattached outposts are denoted with a white diamond, while attached ones are marked with their lane's special symbol.

Whenever a player chooses an outpost, he also gets an opportunity to buy stock in any existing lines. Although the shipping lane's founder gets a five-share headstart, rich players can buy as many shares as they can afford. There's also money to be made as a result of mergers and stock splits, so the victor must be someone part stock manipulator and part wheeler-dealer.

Space Trader exudes the same appeal to acquistiveness and greed that have made games like **Monopoly** and **Acquire** such universal favorites. (Although there'll never be marathon Space Trader games, since the struggle for economic supremacy uses a maximum of 40 turns.) All in all, **Space Trader** is a very good deal for TRS-80 Color Computer gamers. (Chamberlain)

Take stock in America.
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STAND ALONE SCENE

Dark Tower Challenges Adventurers!

by Joyce Worley

Can you defeat the tyrant's band of brigands? Can you withstand the dragon's attack, and find the three magic keys to open the Tower? Can you retrieve the ancient magic scepter that lies within?

All this, and much more, awaits you with Milton Bradley's beautifully designed **Dark Tower**. The game is made up of a plastic electronic tower powered by two "D" size alkaline batteries, a game board, and many playing pieces. The package is thoughtfully designed to provide storage space for the assembled game. Setting up will take some time, but once completed, **Dark Tower** will provide many hours of adventure gaming for one to four players.

While on their mission to lay siege to the Dark Tower, heroes battle brigands, face dragons, get hopelessly lost in uncharted territory, and have bands of warriors decimated by plague. A wizard's curse may be put on them, or they may curse another player.

But the rewards that accompany these dangers are worth seeking. You may win golden treasures, or a dragonsword to help you kill that fire-spitting beast. You may even be awarded the flying horse, Pegasus.

The game board is divided into four quadrants, each containing four buildings—a ruin, a bazaar, a tomb, and a sanctuary. Each quadrant represents a kingdom and is festooned with a flag. In the center of the circular board stands the Dark Tower, the heart of this game.

The Dark Tower is a plastic structure approximately one foot high, topped with its flag. A digital display window signals the action, and three light-up windows present the visual displays of events that occur. There are 12 keyboard buttons with which the player signals his choice of actions.

Three skill levels differ from one another in the number of brigands that must be fought in the Tower. A fourth setting provides a special teaching mode to introduce players to the various functions of the keyboard. Each level can be programmed for one to four challengers.

When play begins, a hero's pawn is located in the citadel square of each kingdom. Moving in a counterclockwise direction, play proceeds around the board, as heroes visit other territories, have adventures, and accumulate treasures. As they travel, they search for the three magic keys which will open the Tower. Each player accumulates the set of three keys by finding one in each of the foreign kingdoms the hero visits. Once a hero has three keys, he returns to his home territory. From there, the hero lays siege to the Dark Tower in which is hidden the ancient magic scepter. If you can overcome the guards in battle, the hero wins the scepter and the game.

Each move around the board is accompanied by a push of a keyboard button. The computer then selects one of six

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Each move around the board is accompanied by a push of a keyboard button. The computer then selects one of six random events: safe move, a battle with brigands lost in uncharted territories, plague, dragon attack, or wizard's curse.

A victory may give the player gold, a dragonsword, a magic key, control of a wizard with his curse, or a token good for a ride on Pegasus, the flying horse.

Heroes with gold may visit the bazaar to purchase additional food rations, a beast for carrying treasures, a scout (who will prevent getting lost), a healer (who can cure the plague), or more warriors. The Tower will display the wares for sale and quote a price in the digital display readout. Haggling has a 50% chance of bringing the price down. However, be careful—if the merchant is offended, the bazaar will close and you'll have to wait for another turn to try again.

Good strategy suggests always traveling the shortest distance between points when moving around the board. It's advantageous to survey the territory and avoid unnecessary moves which will only expose the hero to additional dangers. Also, be certain to watch food supplies, because an army travels on its stomach in **Dark Tower** as well as in the real world. The mini-computer in the Tower will keep track of your dwindling supplies. If they get too low, you must go to a bazaar to acquire more.

But the most important strategy is to attract as many warriors as possible. They can be hard to hang on to at times. Each plague takes two warriors from you, if you don't have a healer. Every dragon attack costs one-quarter of a hero's total gold and warriors. Suffering a curse takes a small toll.

Warriors are most important though in battles with brigands. The bad guys fight well enough to ravage an entire army, especially if they outnumber the good guys. Heroes may retreat, if their band is at a disadvantage, but even this will cost the life of one warrior.

There are other ways to gain warriors besides buying them at the bazaar. Entering a plague territory with a healer gains men, as does slaying a dragon or finding a wizard. Finally, visiting a sanctuary with a band of four or less men results in getting enough aid to double the size of the effected force.

As play proceeds around the board, adventurers acquire one magic key in each country. When one hero finds all three keys and returns to the home citadel, that force can assault the Dark Tower to try to regain the scepter. If the attack is successful, a victory picture appears in the viewing window, and the Tower plays a victory song. The Tower rates players from 0 to 99, but winning the scepter is, in itself, a great accomplishment. Even doing well enough to merit a numerical score is a significant feat.

Because of the randomizing factor in the mini-computer, no two games will ever be exactly the same. Players of **Dungeons & Dragons** or **RuneQuest** will be entranced to see this mechanization of a fantasy role-playing game.

It does have flaws. There isn't as much variety in situations that occur in the game as might have been wished, and play may get a little cut and dried, especially in the battle skirmishes with brigands.

Milton Bradley has done an outstanding job of computerizing a fantasy game. **Dark Tower** is very attractive, and can be played by all members of the family. Though suggested for ages eight and over, parents may need to help youngsters assemble the board and Tower, and coach them on how to play. However, once the game is set up and the keyboard mastered, it is simple enough for anyone to enjoy. **Dark Tower** functions well as either a solitary or group game, and should provide hours of entertainment.

Bank Shot is an electronic pool game for up to four players to delight the hustler in all of us. Parker Brothers recommends it for ages 8 to adult, and while it

Dark Tower—the first computerized fantasy board game

Eight ball in the side pocket! Parker Bros. electronic version of pocket billiards—BANK SHOT

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tle kids will be delighted with the game, the adults who find this in their Christmas stocking will be entranced.

The octagonal unit resembles a flying saucer. The playing field on top of the game measures about 1¾ in. by 2¾ in. and looks like a regulation pool table in diminutive form.

After a musical tone signals the beginning of the game, a glowing red ball appears against a velvety background. Six buttons allow the electronic pool sharks to choose the game, and control the action.

There are four variants. There's solitaire straight pool in which the player trys to sink three racks of balls with as few shots as possible. The second is the two-player version of the same game that allows the players to choose the number of balls, from 10 to 90. The third is "poison pool" in which two players try to pocket the "poison" ball (a blinking ball) after they dispose of all the others. The fourth choice sets up an almost endless variety of trick shots.

After picking the game, pressing the cue/up shoot button makes the cue ball and rack of balls appear. The cue ball is easily distinguished from the others since it is always the brightest one on the table. Pressing the aim button causes two balls of light to appear in front of the cue ball as a pointer, showing the direction the cue ball will travel when hit.

After aiming the cue ball and adjusting the angle, press the cue up/shoot button twice, and two lights representing the cue stick will appear behind the cue ball. To shoot, press the button again, and hold the button down. The longer it is held down, the faster the cue ball travels.

Bank Shot keeps track of the players and indicates the next one to shoot after a miss or a scratch. As soon as one player sinks all the balls agreed upon, a lighted arrow points to the winning player's side pocket.

The instruction booklet that comes with **Bank Shot** is especially valuable to any player who wants to master this game. The instructions show exactly how to sink the basic shots of the game, complete with diagrams and illustrations. It also explains in detail exactly what happens to the ball at each angle. When you have practiced a bit on straight shots and simple angle shots, it's time to move on to finesse, cushion, and combination shots. Then, if you really want to dazzle your friends with some fancy stickwork, practice the trick shots until you've mastered them.

This game is guaranteed to keep the most avid poolhall habitue home at night.

Hold the fate of the galaxy in your hands with ALIEN ATTACK!

Coleco's **Alien Attack** gives electronic gamers the chance to save the universe—or at least a small corner of it—from hordes of alien invaders. The gamer's ship defends against a flight of six alien attackers. When one six-pack of aliens bites the dust, another flight appears. If the defense ship is engulfed or hit by enemy missile fire, another defense ship will take its place. The destruction of the third defense ship signals the end of the game.

Start the game by setting the on/off switch to skill level 1 or 2, choosing regular or fast speed for the attacking aliens. At the higher speed, the aliens really zip around, so it's best to gain some practice at skill level 1 before advancing to the tougher one.

The display panel has four squares across the top which give score readings, and four more across the bottom of the panel. These eight squares act as impenetrable shields, since it's impossible to fly or fire through them.

The unit features an arcade-type joystick control which gives both four-directional movement and firing, depending on which button is depressed. Holding down the "move" button will allow the defense ship to travel in the direction indicated by the joystick. A quick change to the "fire" button, and the defensive missile travels toward the appropriate compass point.

There is a very brief reloading delay following each missile launch. That means gunners must pick targets with some care.

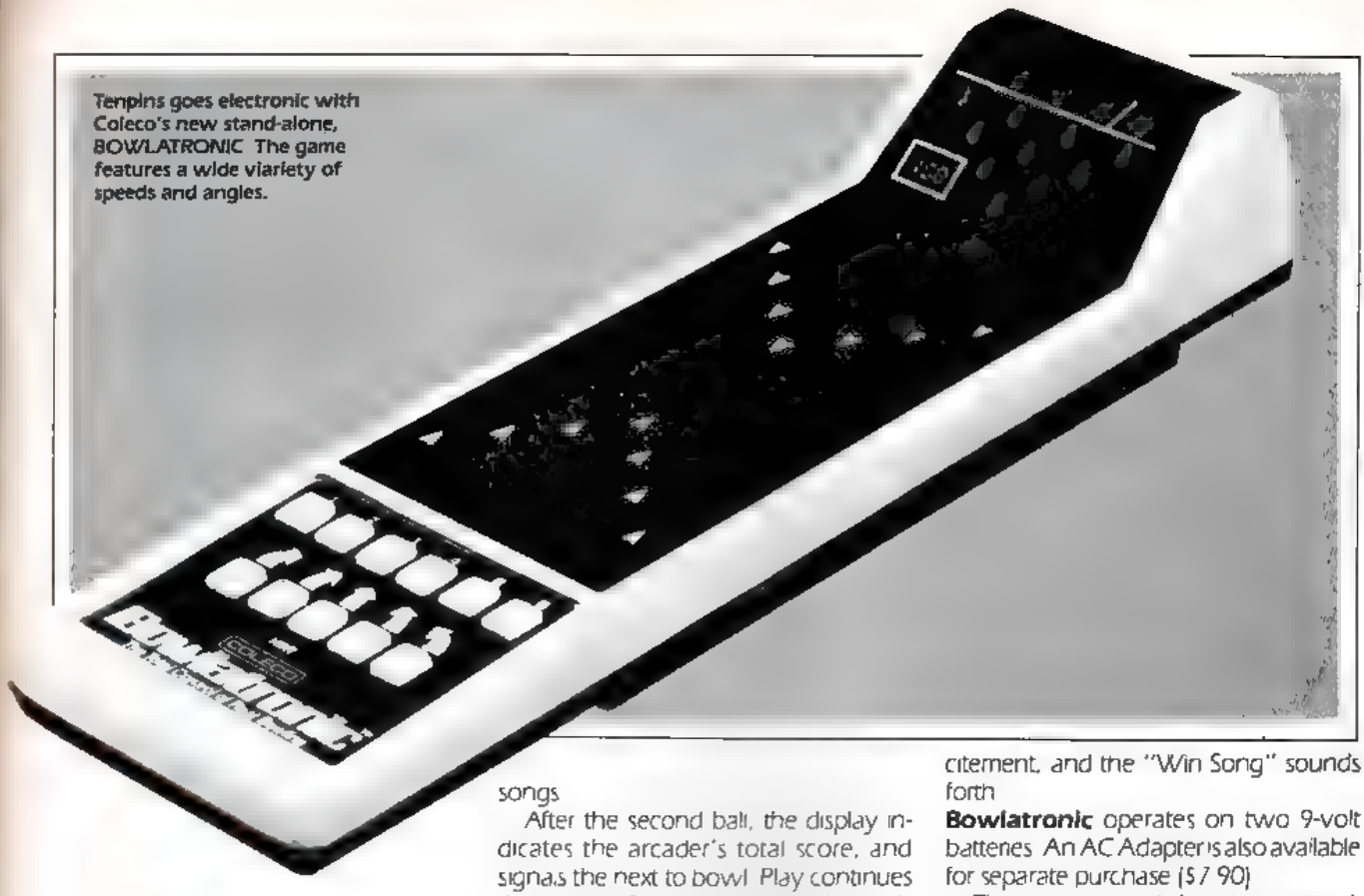
The alien ships attack in two ways. As they swirl across the playfield, the invaders bombard the playfield. If they actually reach the defense ship, they completely engulf and destroy it.

It is good to bear in mind, when playing **Alien Attack**, that the aliens will come on the screen from the corners of the playing field. Try to destroy them there before they get to the middle of the display panel. If they reach the center of the screen, play a cat-and-mouse game, always trying to keep a barrier between the defender and the invader until there is a clear missile shot. The shield panels are very effective, and it's possible to cower behind them like a motorcycle cop in back of a billboard, darting out just in time to tag the alien speeding by. But beware of letting the aliens get in too close, or you won't have a chance to see and evade their destructive beams before they hit your ship.

Gamers score points for each alien dispatched and a bonus for every complete flight of ships destroyed. Speeds increase for each of the first eight flights, and the point values increase proportionately. After that, everything stays at the same high level.

Expect to see some phenomenally high scores on **Alien Attack**. Also expect some trouble prying the game unit out of the hands of anyone who picks it up, because it is definitely addictive. **Alien Attack** may well be the most charming hand-held science fiction game ever released!

Coleco Industries says that **Bowlatronic** gives gamers "the total control of real bowling." While arcaders might miss the smell of the waxed lanes and the noise of the crashing pins, the electronic



Tenpins goes electronic with Coleco's new stand-alone, BOWLATRONIC. The game features a wide variety of speeds and angles.

action should be realistic enough to excite even the most avid ball-flingers.

Up to four people can play, and the computer will keep track of each person's position and score. When first activated, the machine will flash "P" on its digital readout score box, and gamers may press numerals one to four, indicating the number of players. The computer then takes over, showing each player's turn, frame number, and current score.

By pushing the "hint" button, the computer will advise the best path for the ball to follow. The player holds down the button corresponding to the starting point for the ball to be released from. Then, simultaneously push one of the five curve-indicator buttons, and the ball will travel down the lane in the pattern desired.

An electronic animated bowler runs across the top of the screen to indicate the choice of speed for the ball. Keglers simply release the ball when the bowler has reached the desired speed, and the computer does the rest.

The ball, represented by a red cursor, flies down the lane from the chosen spot, curving at the precise angle and speed selected. The pins fall with an electronically produced sound, then the digital display shows the score. If you make a spare or a strike, **Bowlatronic** serenades the player with joyous victory songs.

After the second ball, the display indicates the arcader's total score, and signals the next to bowl. Play continues through ten frames. A spare in the tenth frame gets one extra ball, and a strike in the tenth earns two extra balls, just like in the real thing.

At the end of the game, each player's score flashes. The digital display then indicates the winning player and his score. The pin display strobes in electronic excitement, and the "Win Song" sounds forth.

Bowlatronic operates on two 9-volt batteries. An AC Adapter is also available for separate purchase ($7.90).

This is an unusually handsome stand-alone unit, in a tan matte-finish cabinet, with a transparent red plastic face panel and bright red electronic lights for the play action and read-outs. This is a striking game to give or receive, and will provide spare-time fun for bowling enthusiasts from eight to 80.

Pinball wizards will flip over **Wildfire**, the electronic pinball game from Parker Brothers. It's one of the most attractive handheld games ever produced. Playable by one to four players, **Wildfire** is a completely charming electronic simulation of the full-sized machines.

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WILDFIRE from Parker Bros. puts a pinball machine in your pocket

Own Your Own ARCADE GAME

by Willy Richardson

Once upon a time, the ultimate dream of all arcade fanatics was to own a real, live pinball machine. The well-heeled bought old, even badly damaged flipper games and had them cleaned up—and even rebuilt—often at great expense.

But possessing one meant more than just a chic luxury or hip status symbol. The mere presence of such a wonderful collection of flashing, colored lights and electronic beeps and boops seemed to create its own portable, arcade atmosphere of fun and excitement in one's own home.

Moreover, some of the better flippers were authentic works of pop art. Even the most conventional, roadhouse-quality machine made an ideal conversation piece. And of course, you could even play pinball on them!

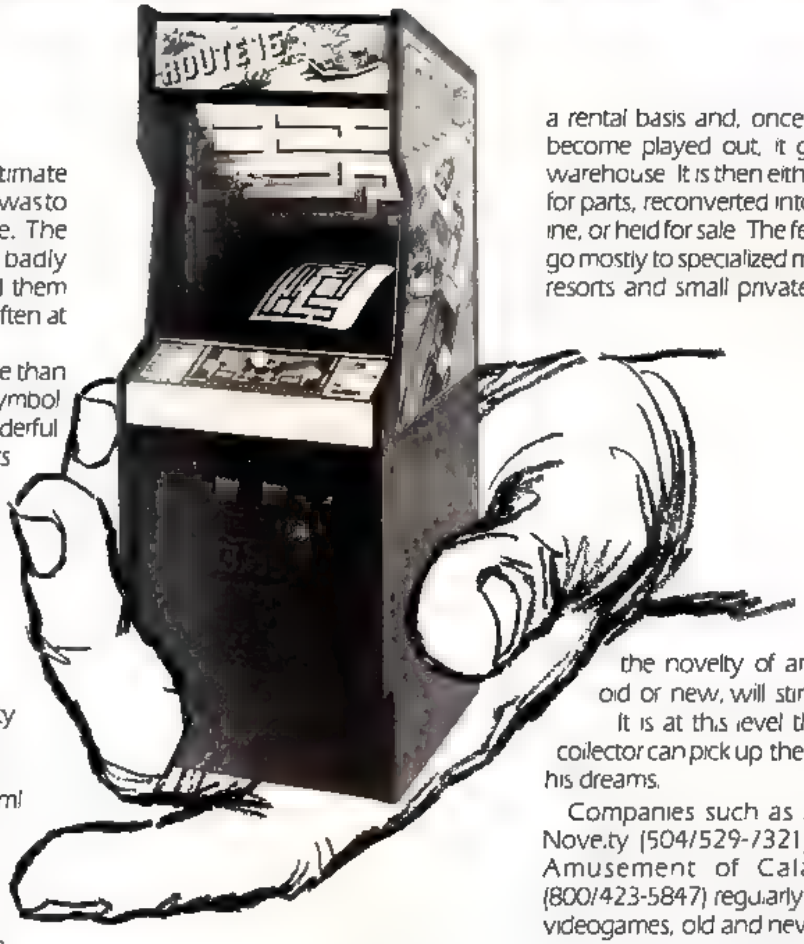
This, however, is all in the past. Just as the videogame has dethroned pinball as the arcade king, today's arcader dreams of the day when he will first plug in his very own **Pac Man, Asteroids** or **Phoenix.**

The most popular type of coin-op videogame among private collectors is still the "cocktail" or table model.

Of course, no coin-op game is cheap. The newer, still popular games cost anywhere from $2,000 to $3,000 new.

In the U.S., the "upright" model is still the standard. But as coin-op units spread to convenience stores and movie theatre lobbies, a new size game cabinet, called "cabaret", has made the scene. The cabaret is a "stand up" game, but it is smaller and more streamlined than the upright. Cabarets can earn as much money as the big machines, but operators can squeeze more machines in.

Cocktail and cabaret models have become the apple of the arcader's eye for two reasons. Both are more desirable (in terms of fitting it in the living room) and more realistic (because of their lower price) to the would-be owner.



But as the life expectancy of most coin-op games is rather short, gamers can often pick up real bargains among the older, classic videogames.

Most arcade operators take games on a rental basis and, once the game has become played out, it goes back to a warehouse. It is then either cannibalized for parts, reconverted into a new machine, or held for sale. The few that are sold go mostly to specialized markets, such as resorts and small private clubs, where the novelty of any videogame, old or new, will stimulate interest.

It is at this level that the private collector can pick up the videogame of his dreams.

Companies such as New Orleans Novelty (504/529-7321) and Theatre Amusement of Calabasas, Ca. (800/423-5847) regularly advertise used videogames, old and new, in the pages of coin-op trade magazines. Another, U.S. Amusements of New Jersey (201/926-0700) specializes in cocktail versions of all the most popular arcade games, from classics to current hits.

The following is a brief listing of some

Centuri's ROUTE 16 (above) in an upright cabinet and a cocktail or table version of TARG (below)

Centuri's smash coin-op EAGLE in upright model(left) and in the popular, smaller cabaret version (right)

The new, Deluxe version of Atari's coin-op supergame, ASTEROIDS

of the more popular classic and modern videogames and the price neighborhood they live in. See anything **you'd** like?

PHOENIX from Centuri in cabaret-style housing popular with gamers

STAR HAWK (Cinematronics/$725)
Great quadrascan-like qualities in a classic science fictional dogfight game. Has aged very well.

BOOT HILL (Midway/$395)
Western target game has gamer using a realistic handgun.

TARG (Exidy version/$1275)
Popular, new sf game now being produced by Centuri.

NIGHT DRIVER (Atari/$400)
Arcade version of the classic driving game.

FOOTBALL (Atari/$475)
One of the most popular arcade sports games ever produced. Unbelievable track-ball action.

VIDEO PINBALL (Atari/$695)
Utilizes beautiful colored plastic overlay to duplicate pinball graphics with remarkable precision. Most realistic version of video pinball ever created.

BATTLEZONE (Atari/$2000)
Not so expensive when you consider that this contemporary Quadrascan classic is still a super moneymaker. The monitor is layed in the cabinet on its back, projecting its image onto a slanted, 50%-reflective surface, behind which a second screen is positioned. Combines new hi-res scanning miracle with remarkable three-dimensional special effects. An sf tank battle on the moon, using a pair of authentic tank joysticks as controllers.

BREAKOUT (Atari/$300)
Atari classic uses ball and paddle to break through a multicolored brick wall. ★

Atari's MISSILE COMMAND coin-op in a sleek, cabaret cabinet

continued from page 65

Lunar Lander (Scott Adams/Atari 400 & 800 and TRS-80/16K) is yet another entry in a field as crowded as the category of **Space Invaders** imitators. Sometimes it seems as though every company capable of copying a cassette is trying to sell a game on this theme.

The Scott Adams version, however, is about as close to coin-op quality as anything now available.

Players begin by selecting one of four skill levels, which range from difficult to ridiculous, and determining the lunar topography. The landing sites look reasonably inviting at the "novice" level, but they become mind-bogglingly convoluted at the "commander" setting. At that level, it isn't unusual for pilots to find themselves jockeying the lander onto pads located at the bottom of ravines or in deep caves.

Pilots steer by moving the joystick to the left or right as needed. Thrust is applied either by pushing the stick forward or hitting the action button. Pulling the stick back sends the lander into a deadfall. A gauge to the left of the playfield records fuel consumption, while an indicator to the right shows the amount of risk—red for "unsafe", yellow for "probably safe" and green for "safe". Players score points based on the difficulty level and the amount of fuel left over after the landing.

The TRS-80 version has one feature not found on the Atari **Lunar Lander**. Once the craft comes within range of the target landing site, the playfield switches to a close-up view to make minute course corrections a shade easier.

Prospective video astronauts should be warned that the retro rockets are extremely powerful in **Lunar Lander**. Too much thrust can send the ship off the screen into a lunar orbit, which results in a lost turn. (Bill Kunkel) ★

standalone scene

continued from page 69

Wildfire is housed in a steel-blue plastic casing. The playing field has a painted design highlighting the features of the game, reminiscent of the beautiful playing surfaces of the larger games.

Everything about **Wildfire** is completely electronic, from the flippers and ball movement, to the scoring and sounds.

The off-on switch allows a choice of volume settings, standard or low. Either volume will provide arcaders pleasant musical tones to correspond with the action.

Two thumb-operated buttons on the sides of the game operate four flippers that guide the course of the ball. By making contact with the ball late or early, the angle of the hit sends the ball in different directions. The flipper buttons also boost ball speed and increase control by activating six "nudge points" in the playing field.

Just like its big-brother relatives, **Wildfire** will mule up if the gamer gets too pushy. It is necessary to be careful not to overuse the flipper buttons. Pressing either flipper button more than twice per second causes the machine to tilt, losing the ball in play and all the bonus points that were scored during that round.

Wildfire is playable by up to four gamers at once, with a choice of three different speeds (beginner, intermediate and expert). To change the number of players, hold down the left flipper button and press the right flipper button until the desired number of players appears on the display. To alter the speed, depress the right flipper button and press the left button until the desired speed comes up. The speed is individually adjustable to compensate for unequal skill among the participants. In fact, gamers can actually change speeds during play if they desire, without interfering with the game in progress.

After picking the number of players and speed, press the shooter button once to bring up the "ball" (a glowing red light) in the firing chute. The display shows which player is the shooter and the number of the ball in play. There are five balls per game. Pressing the shooter button a second time displays current scores. Releasing the button fires the ball. The length of time you hold down the shooter button before releasing it determines the force behind it.

Strategy in this game is the same as in full-size pinball. Try to guide the ball into the high-scoring areas by influencing it with the flippers. Always attempt to light the threee bumpers, as they give bonus points that increase the score.

Wildfire uses six AA size batteries or can be operated with a 9 volt AC adaptor, and should provide hours of fun for every pinball enthusiast. ★

United Way
Thanks to you, it works. For all of us.

strategy session

continued from page 29

help everyone do better, particularly at Atari's **Super Breakout** for the 400/800 computer system.

The **Super Breakout** cartridge actually contains four variations of the traditional game, each requiring a separate strategy.

The first game is standard **Breakout**, featuring eight layers of bricks. The top four are "speed bricks" that double the speed of the ball when they are hit. The best bet is to concentrate on one side of the wall, directing the ball to the left or right by hitting it with the appropriate section of the paddle. Once the ball punches completely through to the top of the playfield, called a "breakout," it'll bounce around back there and score bunches of points. Be prepared, though, to see the paddle halve in size the first time the ball contacts the top of the field. As difficult as BREAKOUT is with a regular sized paddle, playing with the sliver that remains after a ball hits the top of the playfield is considerably more difficult.

The last few bricks always pose a problem. Keep the ball in play, and they'll vanish eventually.

In **Progressive Breakout**, the rows of bricks scroll downscreen toward the paddle. Each grouping of four rows of bricks is separated from the next by the equivalent of four rows of empty space. As the game continues, the effective size of the playfield is constantly shrinking as the walls inch closer to the paddle.

Start the game with the same approach as used in regular **Breakout**, but switch from blasting one side to clearing the entire wall to prevent the build-up of low-lying obstacles.

If the ball stays in play long enough, the walls will drop one level each and every time the sphere hits the paddle. At this point, it becomes virtually impossible to destroy each wall completely as it comes into range. Instead, try to get the ball as far up the playfield as possible so that it will rattle around among the more valuable, five- and seven-point bricks.

Remember that, at this juncture, the paddle will shrivel to half its original size as soon as the ball strikes the top boundary. Switching to an attack on the remnants of lower-lying walls, at least temporarily, will give the game the chance to generate another helping of those seven-point blue bricks. ★

GOTO computer camp

It had to happen. There are foreign language camps, religious camps, sports camps and now—computer camps! As it becomes more and more obvious that computers are the present as well as the future of this society parents everywhere are realizing the importance of aiding their offspring to familiarize themselves with this hot technology.

Creative Computing magazine has started Computer Day Camp to cater to this emerging need. It's so successful that the camp added Saturday morning classes this fall.

"We've even had Atari computer people here to teach the children about their system," says Barbara Garris. "We started the Saturday classes so that kids who've begun programs they're anxious to finish will be able to. We've seen a lot of interest in this idea of a computer camp."

Here Come the Videogame Clubs!

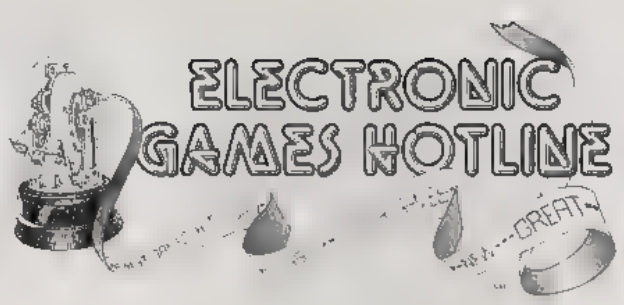
★ Atari VCS and Mattel Intellivision owners will probably want to investigate clubs recently started by both companies for the benefit of loyal fans.

George Dakota was first off the mark with the Atari Game Club. This organization offers membership cards, certificates, a quarterly newsletter and access to the "Club Store." Members can order everything from t-shirts (produced by the Whiz Kids) to sunglasses decorated with the familiar Atari logo.

The Atari Game Club has just made a major move to upgrade its newsletter, doubling the size of **Atari Age** to eight pages. The extra space will be devoted to material about Atari's coin-op games.

Mattel has recently announced the formation of the Intellivision Game Club with George Plimpton as honorary president. Members receive a handsome colored certificate and the quarterly newsletter.

For information about the Atari Game Club, contact George Dakota, c/o Atari Game Club, P.O. Box AGC, Half Moon Bay, Ca. 94019. Intellivision partisans can contact their organization by writing to: Intellivision Game Club, P.O. Box 4010, Burlingame, Ca. 94010.



continued from page 16

Today's Army—Trained On Games

★ The soldier's best friend, his rifle, may soon be as out-dated as the spear and crossbow. The "New Army" still travels on its stomach, but now recruits will be aiming with a joystick and firing by pressing the action button.

"The new weapons systems require the soldier to either look at a video screen or down-range to track a target," explains Capt. Gary Bishop, Plans and Operations Chief at Ft. Stewart, Ga. Mindful of the proven ability of videogames to improve hand-eye coordination, Capt. Bishop is now studying the feasibility of using Atari's **Battlezone** as a tank training simulator.

For the moment, however, Capt. Bishop has a more modest goal in mind. Getting a videogame concession at the fort's PX!

IBM Gets Personal

★ Within the next year a sizable number of arcaders may be playing games on their very own IBM computers. The company, virtually synonymous with electronic brains to most folks, is finally going to produce machines for the home and small business markets.

IBM plans three systems, ranging in price from $1,560 to $4,500. Gamers will most likely be interested in the low-end unit. Sold without monitor or cassette, it comes with 16K of memory. An additional 64K is available for slightly over $500.

All the IBM personal computers are based on a 16-bit microprocessor, the 8088. This chip is faster than the ones used in most other home computers and will be able to handle significantly more complex programs. This could lead to the creation of some mighty complex games, particularly in the realm of fantasy adventures.

How soon will games be produced for the IBM system? IBM will initially concentrate on business software. Once there's a sizable corps of owners, however, suppliers will undoubtedly begin pumping out entertainment software.

'Cue Ball' Controller Makes Coin-Op Debut

★ **Centipede**, a recent introduction from Atari, is the first commercial arcade machine to sport the new smaller track-ball controller. The new size, about as big as the cue ball in pool, makes the revised track-ball much easier to grip.

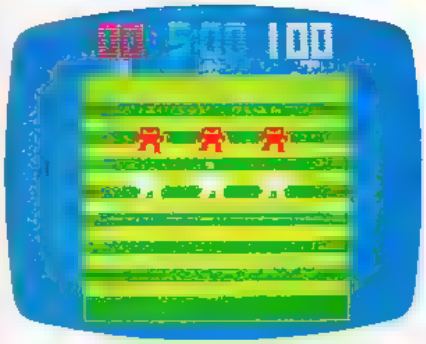
In **Centipede**, the mini-controller is used to move a cannon located at the bottom of the playfield to the left or right. The arcader fires at a huge centipede that is slithering down the screen. Each of the bug's segments has a specific point value.

The smaller track-ball controller is scheduled to get a workout from Atari. It will probably be used on all future coin-ops that would have used the grapefruit-size track-ball.

83
40
MONTIEL

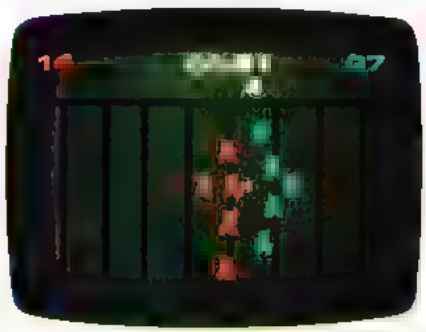
TOUCHDOWN!

The Atari version of FOOTBALL features vertical movement on non-scrolling playfield



Intellivision's NFL FOOTBALL has eye-popping graphics, scrolling, and extensive play selection

The Odyssey² version of video FOOTBALL features non-scrolling, horizontal movement



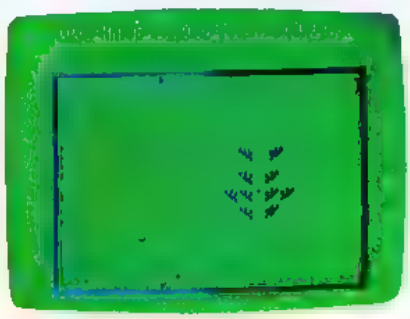
Be An Electronic Chuck Noll!

Through the wonders of modern technology, today's football fan is no longer just a slave to Sunday's broadcast. These days it is possible to hold a miniature stadium in your hand, create your own pigskin action on TV, and build an electronic team from scratch.

Sports games have always been popular with electonic gamers. One of the earliest "electric" games—way back in the early 1950's—used lightweight players mounted on pairs of sensitive, plastic strips. The men moved randomly over the metallic playfield when the gamer switched on a small motor that caused the playing surface to vibrate.

Sports simulations have come a long way since those primitive times. Nowadays, a gamer can choose a variety of game formats, from hand-helds to the highly detailed computer re-creations of the real thing.

Even the hand-held and stand-alone football games are growing in sophistication by leaps and bounds. Coleco and Mattel, pioneers in this area of electronic gaming, with their **Head-to-Head** and **Football** units, vividly mirror the advances the field has made since those early models in their latest releases. Coleco's newest football offering is its **Total Control** sports cartridge system. This table top-size device offers all four major sports on individual cartridges that pop into the center of the game player. Mattel, meanwhile, has just introduced its **Championship** series. **Baseball** and **Football** were the two intial titles.



Radio Shack's FOOTBALL was one of the first software releases for their TRS-80 Color Computer

The middle ground in the electronic football sweepstakes is occupied by programmable home videogames. Most of these versions offer graphic and audio frills that even the state-of-the-art standalones can't match. They also provide expanded play selection, control over whichever payer has the ball and, usually, run and pass options.

Every home programmable videogame system has a football cartridge. The most interesting versions are those for Mattel's Intellivision, N.A.P.'s Odyssey² and Bally's Professional Arcade.

Of these three, only the Odyssey² ver-

Mattel's newest stand-alone entry in the gridiron sweepstakes: WORLD CHAMPIONSHIP FOOTBALL

sion features a non-scrolling playfield. This means the entire gridiron is squeezed onto the screen. The scrolling approach breaks up the field into 40-yard segments and follows the action as it moves up or down field. A non-scrolling playfield is a definite disadvantage, but the Odyssey² designers did such a great job within their limitations that it can almost be overlooked.

Coaches control the quarterback at the snap and can opt to run or pass. Passes are thrown up, down or straight ahead. When one is completed, control is instantly re-assigned to the wide receiver. All other players move according to the pre-set play, with computer-controlled defenders programmed to go after the man with the ball.

Bally's programmable pigskin has everything the Odyssey² version has and then some. The Bally system, like the Intellivision, has a computer's power and therefore throws in such delightful extras as fight songs, crowd cheers, scrolling and top-flight graphics.

But the cartridge most arcaders agree is the best "action" version of pro ball is the Intellivision's **NFL Football**.

Mattel's **NFL Football** comes with a playbook that would make most college teams jealous. Some fans claim that, if anything, this game is **too** realistic, with more plays than anyone but a pro linebacker could possibly want or need. Others criticize **NFL Football** for its slow playspeed, a common complaint with Intellivision games. The Master Component was basically designed to play sophisticated sports and military simulations rather than dexterity-skill style arcade games. In exchange for the marvelous graphics, the scrolling playfield, the highly realistic figures and the wonderous sound effects, Mattel had to sacrifice fast play action. When simulating a more leisurely-paced sport, such as **NASL Soccer**, this is barely noticeable. For others, such as **Major League Baseball**, it is a tad slow. In **NFL FOOTBALL**, the team coaches can watch the action unfold as if it were a slow-motion replay. Whether you find this a positive or negative factor depends upon individual tastes.

The high end of the plugged-in pigskin parade consists of the various strategy-oriented computer games. Computer football games, however, do not yet emphasize elements such as graphics and play action, instead concentrating on the true "coaching" elements involved in football. This generally begins with play selection, but one progam, Stategic Simulation's **Computer Quarterback**, goes right to the heart of every armchair Bum Phillips' real desire: to build a team from scratch.

In its most advanced version, **Computer Quarterback** allows each coach to buy his team, man by man. Coaches who'd like a "Steel Curtain" can spend bucks on the big D. Those who prefer an air-circus can fashion a computer version of the San Diego Chargers.

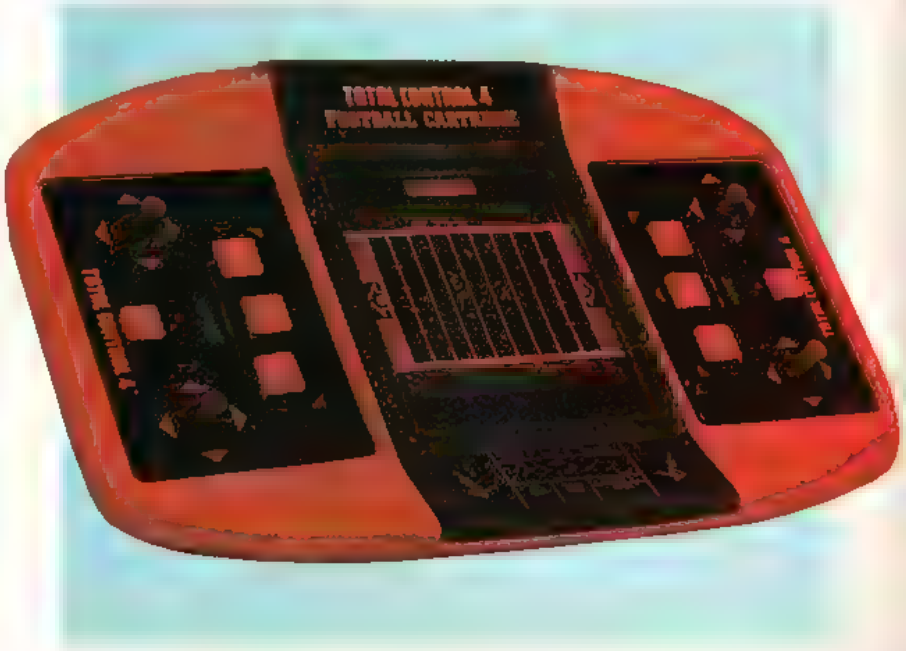
Whatever your theories, the options are nearly endless.

There are, however, more graphically oriented computer football programs. On-Line Systems' **Hi-Res Football** represents a real attempt at combining graphic and strategic elements in a single package.

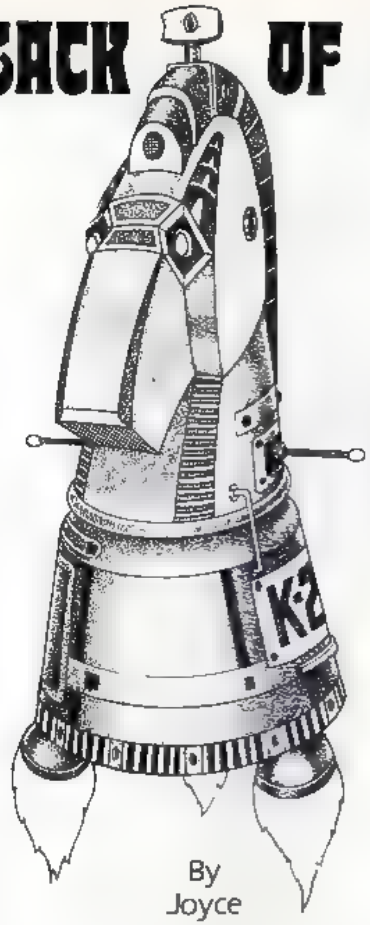
Mattel, meanwhile, has recently announced that it plans to release **Super NFL Football** on cassette, to be played using the Intellivision keyboard. Since the long-promised keyboard has yet to be delivered, there's no way of knowing when we'll actually see this one in our living rooms, but it promises quite a bit. It is played in three-quarter perspective (just like **NASL Soccer**), as opposed to superimposing the on-screen athletes over a bird's-eye view of the playfield. Cheerleaders leap into the air on the sidelines, players are fully animated and there are even slow-motion instant replays.

As marvelous as these upcoming cartridges sound, even greater delights are in store. The rapid progress in electronic gaming technology guarantees it. It's possible that football-crazy arcaders will someday re-read this article, stifle a yawn and ask, "What, no half-time show!?" ★

Coleco's TOTAL CONTROL system is programmable



ATTACK OF THE CHESS ROBOTS



By Joyce Worley

Your fingers cling to the piece for one last instant. Then, all uncertainty banished, you make The Move. Check. Across the table, sounds blare, lights flash and an arm flails wildly in dismay.

Ungentlemanly behavior? Nothing could be closer to the truth. The opponent facing you this day is certainly no gentleman!

With a click and a whirr, a metal arm glides over the board, grasps a piece and moves it to the desired square.

Now the complexion of the situation has entirely reversed. Survival, not victory, is uppermost in your mind as you reluctantly make another move. Now it's your turn to squirm while your inhuman foe delivers the **coup de grace.**

Checkmate. You've just become the latest casualty in the attack of the chess robots.

The joyously celebrating mechanoid that just snatched sweet victory out of your hands is the **Robot Adversary** by Novag Industries. This most unusual of all the chess-playing computers uses sensor-touch technology to automatically detect the human player's moves, which are made on a regular board with actual pieces.

Then the **Robot Adversary** uses its 24K microcomputer chess program to scan up to nine moves in advance. Having determined its best strategy, the machine's arm transfers the desired piece to the appropriate square. The **Robot Adversary** even resets the board after each game.

Fidelity Electronics started the ball rolling in 1977 when it created the first dedicated chess-playing computer, the **Chess Challenger.** More than 1,500,000 devoted pawn-pushers have acquired such devices since then, often ending years of frustration due to the chronic scarcity of suitable human opponents.

Fidelity's improved version of the program that won both the world and U.S. microcomputer chess titles in 1980 is the heart and soul of its **Champion Sensory Chess Challenger.** Each time a piece is shifted from one square to another, the move is automatically recorded by the unit's brain. The SCC plays a lot faster than some of the early chess robots—crucial in timed tournament play—by plotting its strategy while the human player is moving.

The **Voice Sensory Chess Challenger** goes the SCC one better. It employs a 50-word vocabulary to audibly call out every move and capture. For an extra thrill, Fidelity makes versions of this model that will checkmate the unwary in German, French or Spanish as well as English. The program, which contains 224,000 of ROM (read only memory), plays at nine skill levels. It is thus easy to match the device to the ability of the human, whether novice or master, to guarantee a remarkably even game.

The modestly priced **Chess Challenger 7** has seven levels of skill. Audio feedback produces a single tone each time you press a key, and a double tone when the computer responds. A large one-half inch LED display shows all positions.

The **Voice Chess Challenger** incorporates all the features of the **Chess Challenger 7,** but gives the computer the ability to talk back. It announces all of its moves and repeats all of yours. It is ideal for use by the blind, since the game will also repeat all board positions on demand.

The **Decorator Challenger** contains all the features of the **Voice Chess Challenger,** but gives players a choice of ten levels of skill. Its full-sized hand-crafted hardwood chessboard and handcarved pieces makes this the most beautiful unit now on the market.

Scientific Systems boasts that its best machine, the **System 5,** is the strongest microchess computer ever developed, playing at a 1900 level under tourna-

Novag's impressive ROBOT ADVERSARY is the ultimate in lazy man's chess—a mechanical arm even moves the pieces!

ment conditions. SciSys also offers a portable chess computer, the **Chess Traveler**, and **Intelligent Chess**, which uses any TV set as a display monitor, much like videogame systems. It plays at 13 levels of difficulty. **Executive Chess** is a hand-held unit with eight levels of play, a large LCD chessboard, and attractive styling in a matt-finish luxury cabinet. It operates either by batteries or adapter.

Fidelity's DECORATOR CHALLENGER (top) and DAME CHALLENGER (bottom)

Applied Concepts boasts a versatile line of chess robots. The well-known **Boris** has been replaced by a more powerful **Morphy** program, bringing greater skill levels.

Applied's **Great Game Machine** is a programmable game-playing unit that takes several cartridges similar to those used with videogames. Currently available are **Morphy** (chess), **Borcheck** (checkers), **Odin** (reversi), **Las Vegas** (blackjack), **Kriegspiel** (chess variation) and **Gruenfield Openings** (chess openings). The versatility of this machine even makes it possible to use the **Gruenfield** cartridge to open the game, and then switch to **Morphy**. The **Great Game Machine** retails for $229.95 and each cartridge is around $100.

Applied Concepts also offers, in the mid-price range ($219.95), **Morphy Chess** as a stand-alone game. Those on a budget will also want to look into the **Diplomat**, priced at $79.95.

Ave. Micro System's chess game combines Sargon 2.5, a microcomputer chess program, with a handcrafted walnut and maple hardwood Auto Response Board. Hand-carved chikan and rosewood chess pieces complete this unusually handsome system. The board automatically senses your moves and responds with small lights indicating which piece the computer wants to move and where it wants to move it. The board is modular, and as improved programs become available they may be plugged in to instantly update this chess computer. A checkers module is also available ($149). The entire game system, called **Sargon 2.5 Chess Program & Auto Response Board**, retails for $875.

In addition to the **Robot Adversary**, Novag Industries' line includes **Novag Micro Chess**, the world's tiniest portable chess computer, with Sensor Technology. It can play at eight skill levels, for approximately 12 to 15 hours on one set of two 9-volt batteries.

The **Novag Super Sensor IV** is a moderate-priced computer with an 8K program and sensor technology. To move, you press your piece in place and then again in the desired square. The computer moves are pointed out by lights at the board's edge.

The **Novag Savant** boasts a 24K program, thinking up to nine moves ahead. Play is on a large LCD chessboard by touching the piece symbol and the square desired. The computer will complete the move and respond automatically.

Pocket versions of BACKGAMMON (top) and CHESS (bottom) from Mattel

The oldest producer of computer games players is Tryom, Inc. It actually developed a machine in the early 70's. However, Tryom decided to put its weight behind a backgammon system and dumped its first chess machine in 1973. Two years ago, Tryom realized

that the market potential for chess players had grown beyond early expectations and went into production with the CC-700 chess system. Called **Electronic Chess**, this portable model lists at $49.95, plays at seven levels, and comes with a 9-in. magnetic wooden chessboard and playing pieces.

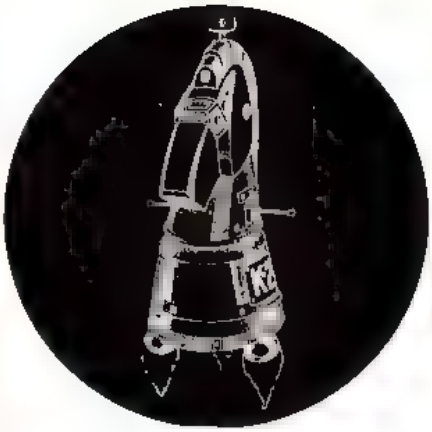
Now, everyone's getting into the act, as the market for chess robots continues to expand. Mattel, the latest to show interest, announces that it will soon come out with a chess machine.

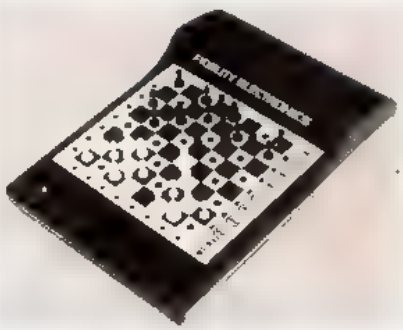
Chess-playing machines offer a solution to the perennial problem of the chess addict finding an opponent of equal skill. Since most people play at the 1200 to 1600 level, and most machines satisfactorily fit within this range, they are very suitable for all but the most advanced chessists. The prices for these games run from as low as $50-$60 for hand-held, battery-operated machines, to deluxe models costing $1,500 or more.

The features of the machines coincide with the price. All play a good game, and perform as they purport to do.

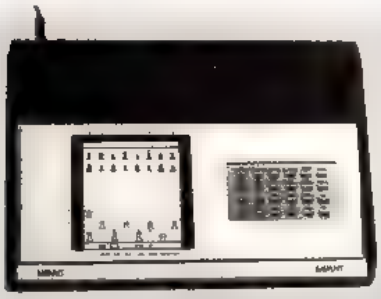
So if you're tired of postal chess and don't enjoy spotting baby brother two rooks and a knight every game, then a chess-playing machine could solve the problem overnight. ★

The SciSys chess family (top to bottom, left to right): CHESS CHAMPION MARK V, SENSOR CHESS, CHESS TRAVELER, GRADUATE CHESS and EXECUTIVE CHESS



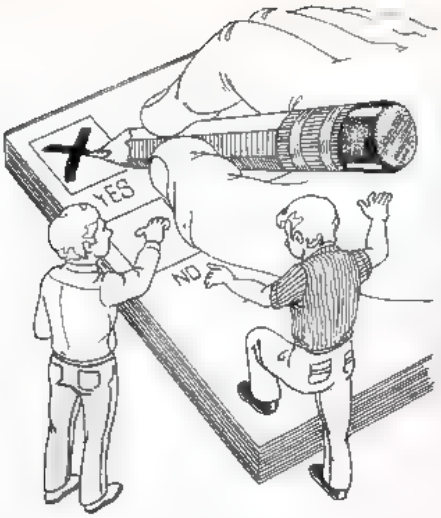


Fidelity's MINI-SENSORY CHESS CHALLENGER "senses" moves"



Novag's portable SAVANT model includes an LCD chess board

Fidelity's top of the line chess player, the CHAMPION SENSORY CHESS CHALLENGER, has digital timing



READER POLL

One of the hazards of pioneering is that sometimes you end up flying blind. We need some information about who our readers are, what they like in the way of a magazine, and what they can live without.

Please take a few minutes to fill out the questionnaire below and return it to Electronic Games, 235 Park Avenue South, New York, N.Y. 10003. We'll be reporting the results of the poll in the next issue. Your response will help us create the kind of magazine you want.

Sex: Male____ Female____

Age: Under 16____ 16-25____ 26-40____ Over 40____

Family Income: Under $12,000____ $12,000-$19,000____
$20,000-$39,000____ Over $40,000____

Education:
High school student____
High school graduate____
College student____ College graduate
Graduate school student____
Advanced Degree____
Less than high school____

Please check off the electronic entertainment devices you now own or intend to buy within the next 12 months.

	Own	Plan to Buy
Atari VCS	____	____
Odyssey²	____	____
Intellivision	____	____
Other videogame	____	____
Chess computer	____	____
Atari 400/800	____	____
Apple II/III	____	____
TRS-80 Model I/III	____	____
TRS-80 Color Computer	____	____
Other microcomputer	____	____
Video cassette recorder	____	____
Video disk player	____	____
Giant screen TV	____	____
Color television set	____	____

Please rate the following features from 1 (awful) to 10 (great):
Switch On!____ Q&A____ Test Lab____
Strategy Session____ Stand-Alone Scene____
Computer Playland____ Programmable Parade____
Arcade Spotlight____ Insert Coin Here____
E.G. Hotline____ Player Guide____ Inside Gaming____

The article I liked best in this issue was:
_____

The article I liked least in this issue was:
_____

The article I would most like to read is:
_____

Please rate the following possible subject from 1 (not very interesting to me) to 10 (of great interest to me):
Programmable videogames____ Coin-op games____
Hand-held games____ Tabletop electronic games____
Computer Chess____ Sports games____
Fantasy & Science Fiction games____

My favorite videogame cartridges are:
1 _____
2 _____
3 _____

My favorite computer games are:
1 _____
2 _____
3 _____

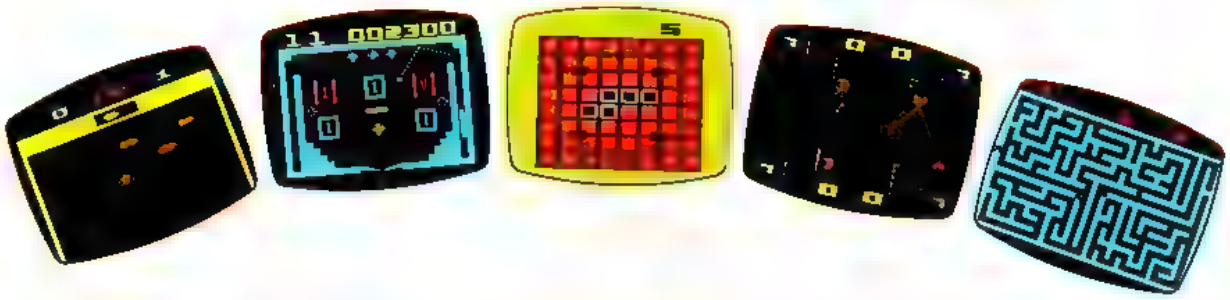
My favorite coin-op games are:
1 _____
2 _____
3 _____

Please check the number of hours you spend **per week** playing all types of electronic games: Less than 2 hours____ 2-5 hours____
6-10 hours____ More than 10 hours____

How much do you spend **per week** on electronic games:
Under $2____ $2-$5____ $11-$25____ $26-$100____
Over $100____ ★

Don't want to mar your copy of Electronic Games? Feel free to photocopy this page.

Coming NEXT in electronic GAMES



The year 1982 is the 10th anniversary of the first programmable videogame. Electronic Games will celebrate this landmark event in arcading history in its second smash issue. Among the "must read" features in **ED #2** will be

The History of Videogames

They came to life in the garage of a maverick inventor and have swept to worldwide popularity in less than a decade. Now, for the first time, learn the inside story of the beginnings of America's fastest-growing hobby!

The 1982 Arcade Awards

Which cartridge will be the videogame of the year? You'll find out the winner of this and other major categories in a multi-page salute to outstanding gaming achievements.

The Videogame Hall of Fame

Find out which games **EG**'s panel of experts enshrine as the all-time best—and why. Will your personal favorites make the grade? Read this article to learn the answer.

How Videogames Are Made

Most arcaders have probably wondered just how the games they love get from the drawing board to the coin-op parlor. Next issue **EG** visits the main Atari factory in Sunnyvale, Ca., to show how it happens step-by-step.

The Players Guide to Electronic Science Fiction Games

Electronic Games' magazine-within-a-magazine blasts into the farthest reaches of outer space to explore every facet of today's most popular game theme.

There'll be plenty of other articles and features of interest to arcade addicts, plus these regular columns:

- Switch On!
- Test Lab
- Inside Gaming
- Arcade Spotlight
- Strategy Session
- Programmable Parade
- Readers Replay
- Q&A
- EG Hotline
- Insert Coin Here
- Stand-Alone Scene
- Computer Playland

And introducing a brand-new column devoted to electronic role-playing games—

- Passport to Adventure

So watch for the special issue of **Electronic Games**

On Sale

JANUARY 14 1982!

ARCADING— BIG APPLE STYLE

It's fitting that, in the first issue of **Electronic Games**, the arcade spotlight is focusing on the coin-op capital of the world. New York City. No place on earth is as closely associated with electronic gaming in the public mind as Times Square. With its gaudy signs and flashing neon lights, the whole area resembles nothing so much as one giant arcade machine.

The Broadway Arcade Amusement Center, situated on the corner of 52nd Street and the Great White Way, is the largest electronic fun palace in the Big Apple. Its magnificent main floor boasts an extensive array of videogame uprights and pinball machines. Arcaders enter a wonderland of strobing lights, star fields and invading aliens the minute they step through the Broadway Arcade's main entrance.

The 52nd Street wall is pinball machine territory. Proprietor Steve Epstein maintains a good mix of traditional analog machines and the newer, souped-up digital flipper games.

Videogame uprights occupy about 60% of the floor space, lined up in columns. Few gamers will be able to keep their quarters buried in their pockets when faced with this glorious gauntlet of coin-snatchers.

Steve Epstein has filled his parlor with just about every electronic game worth playing, both the classic stand-bys and the newest marvels. **Space Invaders, Galaxian, Asteroids, Pac Man** and **Phoenix** are all present and accounted for, but the Broadway Arcade also receives many new machines for testing. Its regulars are often the first arcaders in the nation to play newly developed coin-ops.

One newcomer that really got a workout the day **Electronic Games** paid its visit is **Venture**. This Exidy design is the first commercial arcade game that includes role-playing elements similar to **Dungeons & Dragons**. In this one, the gamer battles goblins, serpents, spiders and other evil creatures on the way to rescuing a fair damsel—and picking up

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One newcomer that really got a workout the day **Electronic Games** paid its visit is **Venture**. This Exidy design is the first commercial arcade game that includes role-playing elements similar to **Dungeons & Dragons**. In this one, the gamer battles goblins, serpents, spiders and other evil creatures on the way to rescuing a fair damsel—and picking up any treasure within arm's reach. **Venture** features a multi-floor dungeon, with halls and chambers on each level. Everything is rendered in colorful, high-resolution graphics that make **Venture** nearly as much fun to watch as to play.

Among other new games getting a sneak-preview are: **Pleiades** (Centuri), a multi-part combat game; **Samurai** (Midway), an oriental sword-fighting contest in a bamboo-trimmed cabinet; and **Space Odyssey** and **Space Fury** (Gremlin-Sega), a pair of potential science fiction classics.

Space Odyssey's visuals are particularly noteworthy. A new process produces up to 256 pastel colors on the monitor. The more delicate tones make an interesting contrast to the less subtle colors generally used by coin-op devices.

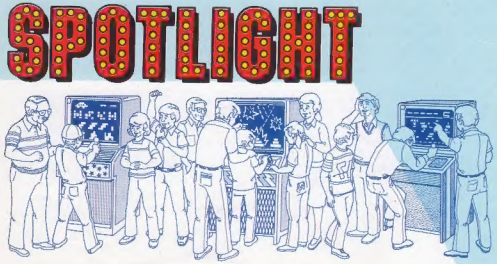
The most popular games at the Broadway Arcade are pretty much the expected ones. "**Pac Man, Defender** and the original **Asteroids** are our most played games," says Epstein. "**Super Cobra** is another big one. Among the newer games, **Samurai** has done really well."

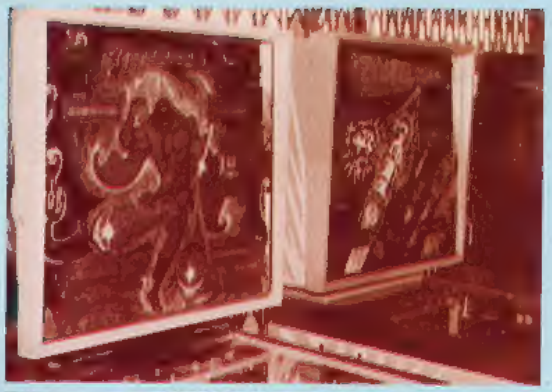
Commercial arcades have come in for attack lately from some people who view them as the modern version of the dreaded "pool hall," thick with cigar smoke and unsavory characters. Operators like Steve Epstein are a walking antidote to such misguided notions.

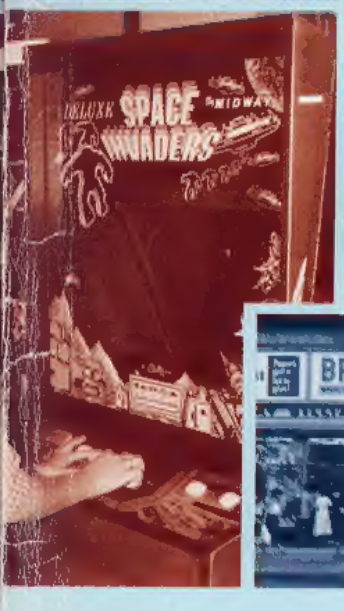
As far as school kids playing truant to feed their lunch moneyto the **Pac Man** "gobbler" goes, Epstein believes he has the answer to any potential problem. "When school is in session," he states, "we don't allow children in here during school hours."

"I think," he adds reflectfully, "that as time goes on, arcades are losing the stigma that used to hang over them. As people become more familiar with these games—and stop being intimidated by them—they begin to see the whole thing for what it really is—good clean fun."

And good clean fun, served up in huge helpings, is exactly what Steve Epstein and his merry cohorts are providing at the Broadway Arcade Amusement Center. For about the same cost as an afternoon at the movies, arcaders living in or visiting New York City can spend several fun-packed hours in the clutch of arcading ecstasy. ★







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